

Panel

SET ALLIANCE

The Path to Efficiency-as-a-Service: A Guide to Creating Customer Value



FLORIAN ANDRÉ
Founder & CEO of P2S
Management Consulting



DOMINIEK PLANCKE
CEO of ETAP Lighting
International



DR. ELVIRA RAKOVA
CEO & founder Direktin



DAWIE KRIEL
General Manager at Energy
Partners Refrigeration

ETAP LIGHTING INTERNATIONAL NV

Who we are?



Founded in 1949
in Antwerp



Family owned lighting
company



HQ, R&D and production in
Malle, Antwerp



European quality



275 employees

ENERGY EFFICIENCY AS A SERVICE FOR COMPRESSED AIR SYSTEMS

Dr. Elvira Rakova
elvira.rakova@direktin.com



ABOUT **US**

EXPERTISE

Dr. Elvira Rakova is a lead ISO expert for pneumatic systems (France)
Guest lecturer at University Federico II (Naples, Italy)
12 years of experience
PhD in compressed air systems and pneumatics (TU Dresden, Germany)

IN-HOUSE SOFTWARE

EasyCas Direktin Software developed based on ISO standards, test results, and measurements including best practices for energy-efficient measures. Certified by ARTEMA (Industry association of France)

PLATFORM

Full life cycle efficiency projects with monitoring.



Dawie Kriel
General Manager
Energy Partners
Refrigeration



Cooling-as-a-Service:

**Innovative,
data-driven,
responsible
refrigeration**

Energy Partners Group – since 2009

Cooling



ENERGY
PARTNERS
REFRIGERATION

180
MWR

total installed
refrigeration capacity

Heating



ENERGY
PARTNERS
STEAM

190
T/hr

contracted
steam capacity

Solar, Storage



ENERGY
PARTNERS
POWER

150
MW

operational renewable
energy project

Asset Management



ENERGY
PARTNERS
ASSET MANAGEMENT

R13.3
billion

bills under
management

Strategy & Solutions



ENERGY
PARTNERS
SUSTAINABILITY

R3.6
billion

saved for
clients

EP **invests** in and
operates energy assets
for the benefit of our
clients

\$70m
(+R1,4Bn)
invested since
2009

450 people
7 offices





We guide B2B hardware companies in their shift from selling products to selling recurring subscriptions.

Develop your own Subscription, Pay-per-Use or X-as-a-Service business model.



P2S Management Consulting

Florian André

P2S Management Consulting guides companies through a business model innovation process to help them develop and launch their recurring revenue business models.

Our Mission:

To guide manufacturers in their shift from selling products and software to selling **recurring subscriptions**. We leverage our expertise and partners in subscription and X-as-a-Service models to enhance our clients' **competitiveness, sustainability, and revenue predictability**.



Founded in 2019, boutique consultancy specialising in **subscription and As-a-Service business model transformations**.



Insights and **best practices** from **300+ successful subscription models**.



Subscription Action Plan™: a step-by-step methodology **tackling all key challenges** faced during the business model innovation process.



Subscription Experts Ecosystem™: access to 20+ partner companies and tools. Financing, pricing, insurance, legal, IT-infrastructure, IoT-infrastructure, ...



20+ clients in **various industries, in Europe and North America**.

P2S Management Consulting helps clients in various industries transform their products into recurring subscriptions. P2S works with clients in Europe and the Americas.

Lighting Equipment



Energy Efficiency Equipment



Heating, Ventilation, Air Conditioning



Industrial Automation & Energy Mgmt.



Drive Systems & Transportation



Power Tools



Inspection Systems



Measurement Equipment



Medical Devices

Clients prefers to stay anonymous

Process & Packaging Equipment

Clients prefers to stay anonymous

Injection Moulding Equipment

Clients prefers to stay anonymous

Audio-Visual Equipment

Clients prefers to stay anonymous

Clean Room Equipment

Clients prefers to stay anonymous

Blasting Equipment

Clients prefers to stay anonymous

Recycling Equipment

Clients prefers to stay anonymous

Webinar

Poll on EaaS value proposition

What keywords or phrases come to mind regarding opportunities or challenges when you think about X-as-a-Service (XaaS)?

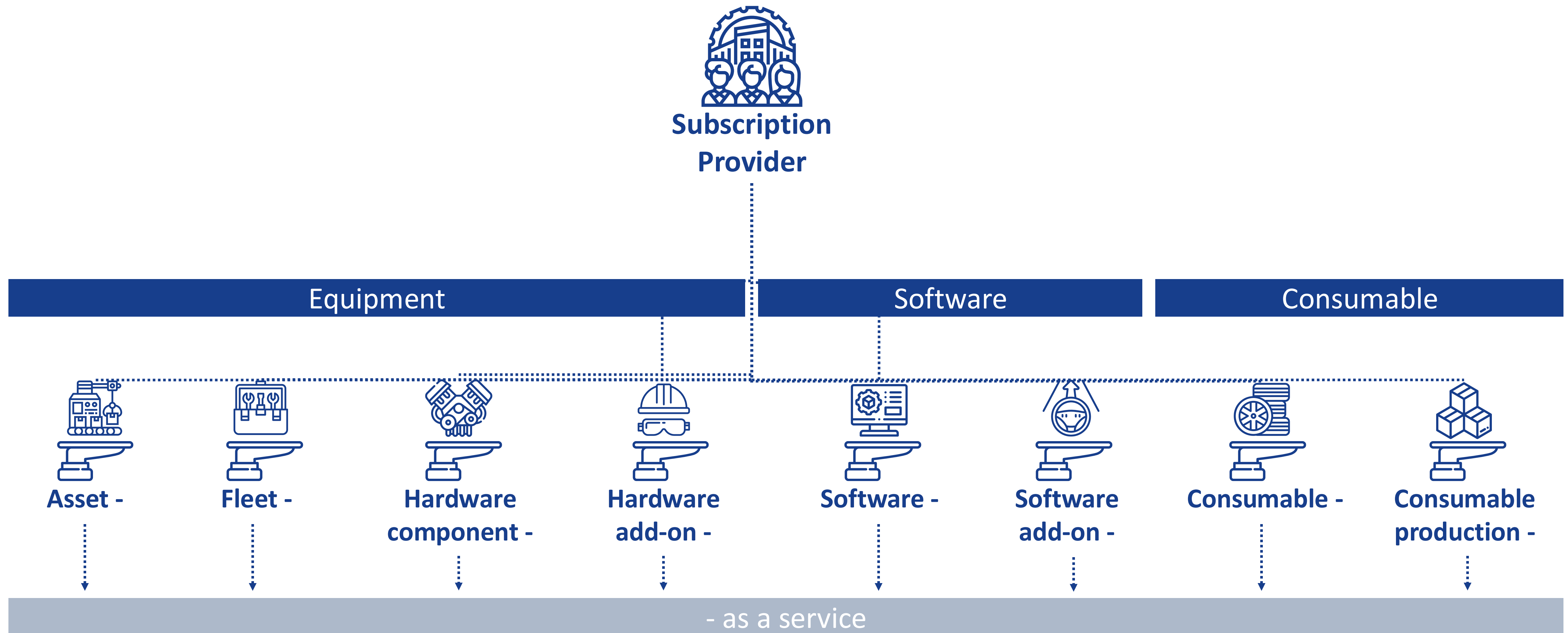
Please share one or two that resonate most with what you're hoping to explore today.



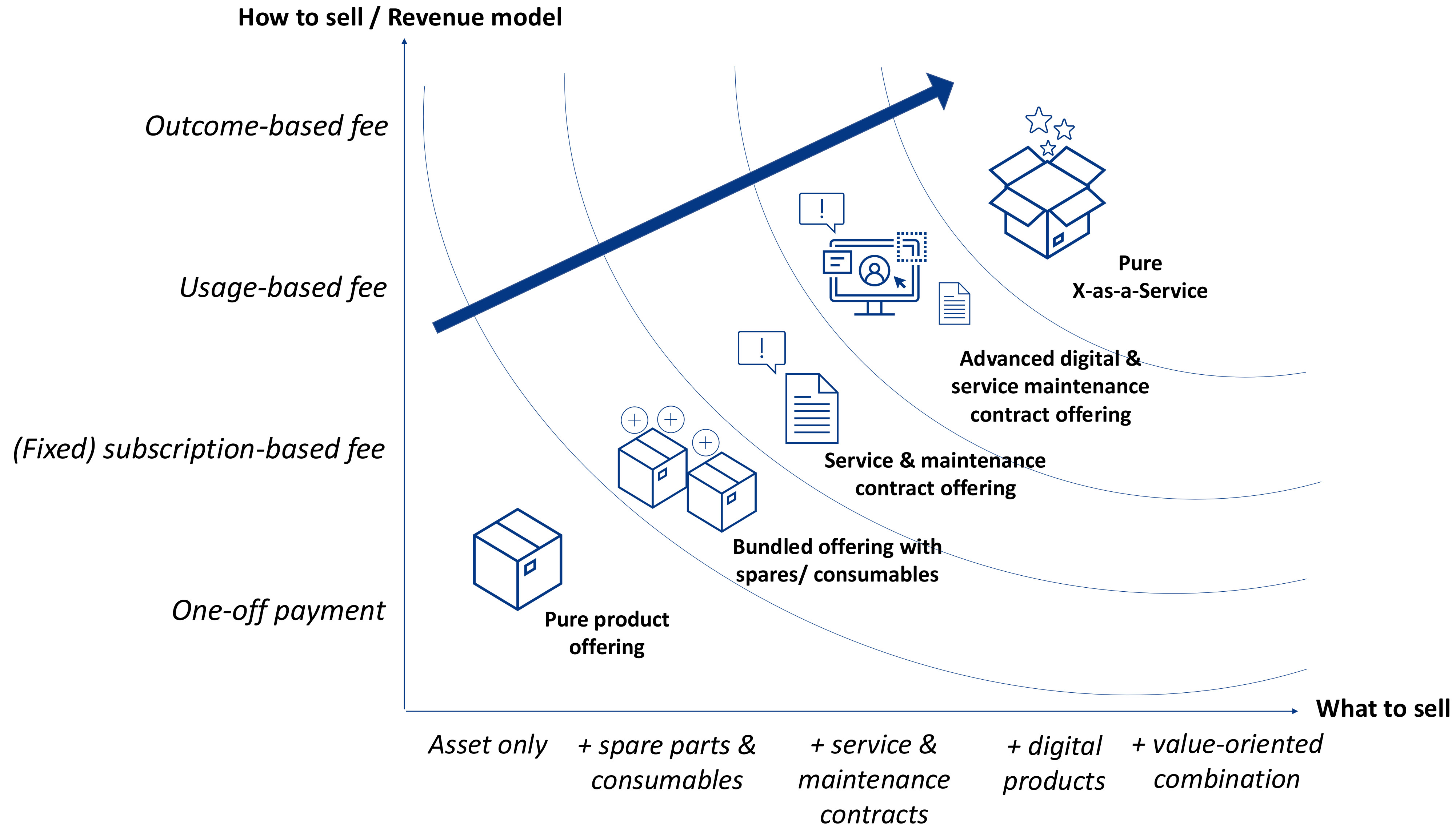
Developing EaaS propositions

Where in your business could you develop a
subscription model?

You can develop a subscription model for your equipment, software, consumables and services – or for all of them together.



Different revenue models exist, varying from subscription, via usage- to outcome-based pricing models.

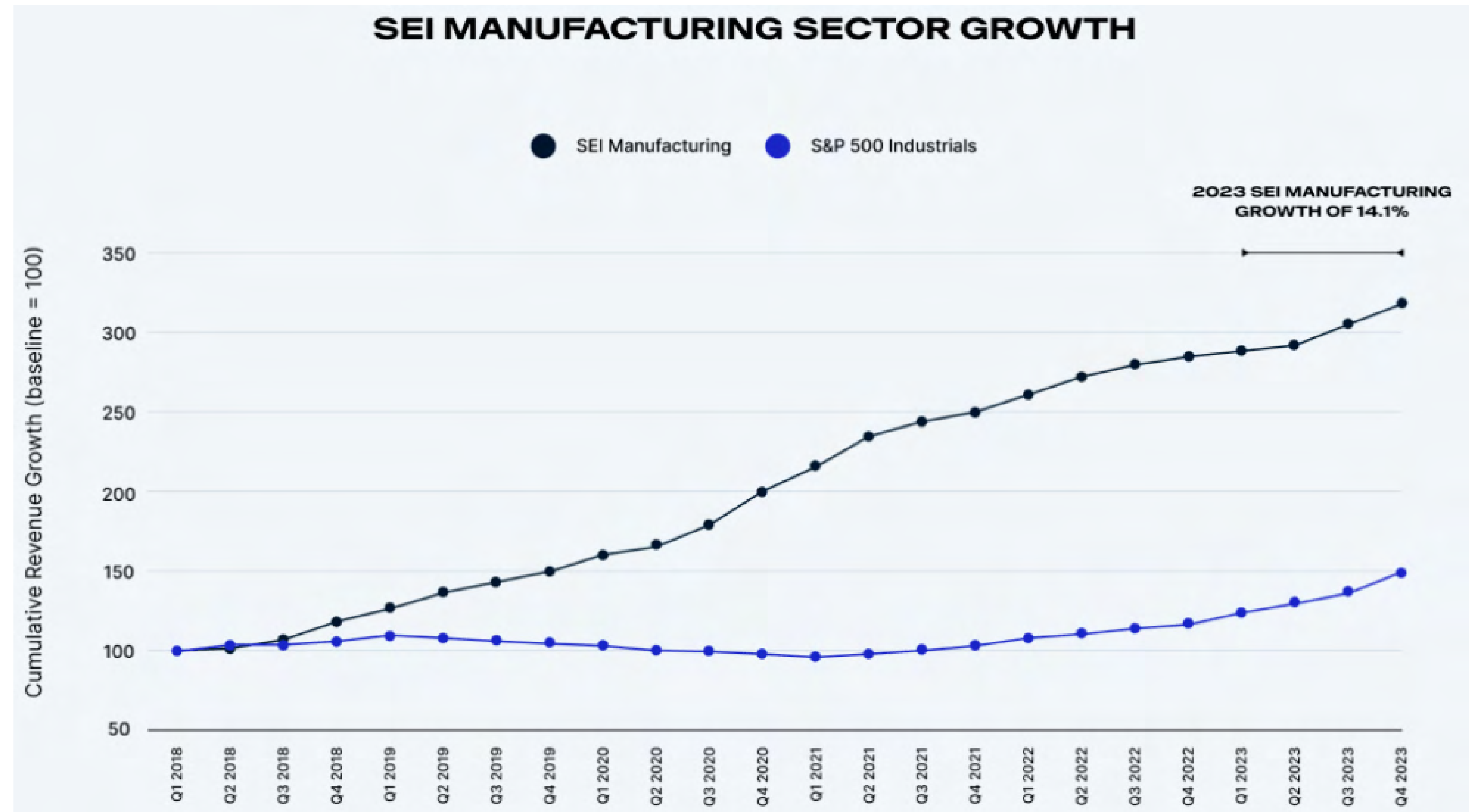


More numbers about subscription models in the manufacturing industries

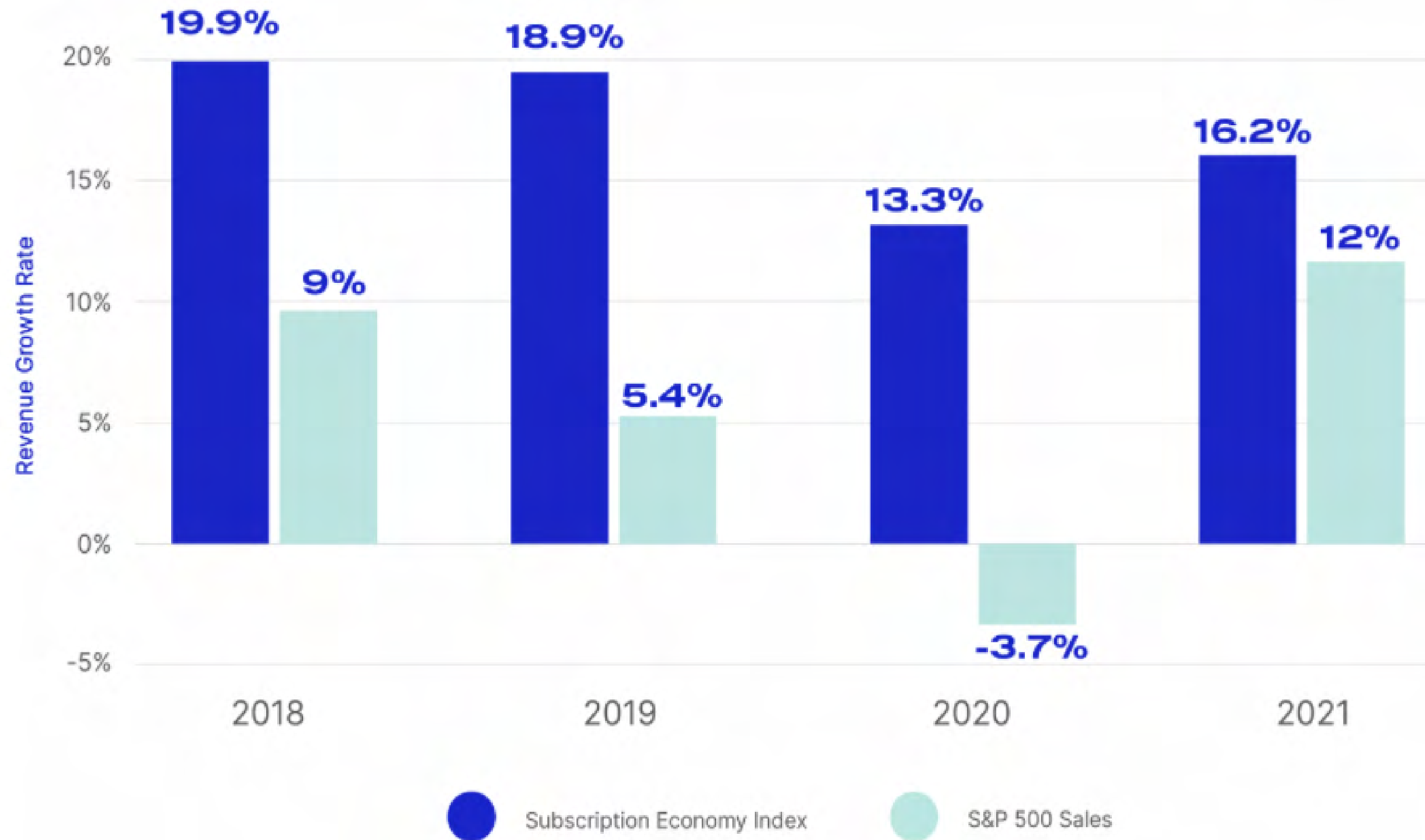
Manufacturers offering subscriptions grow faster than traditional manufacturers.

Revenue Growth: Manufacturing Industry

Subscription business models provide a new monetisation route through digital connectivity, usage of available data, and recurring services for an industry that is showing signs of growth stagnation, while facing rising input costs and declining margins.



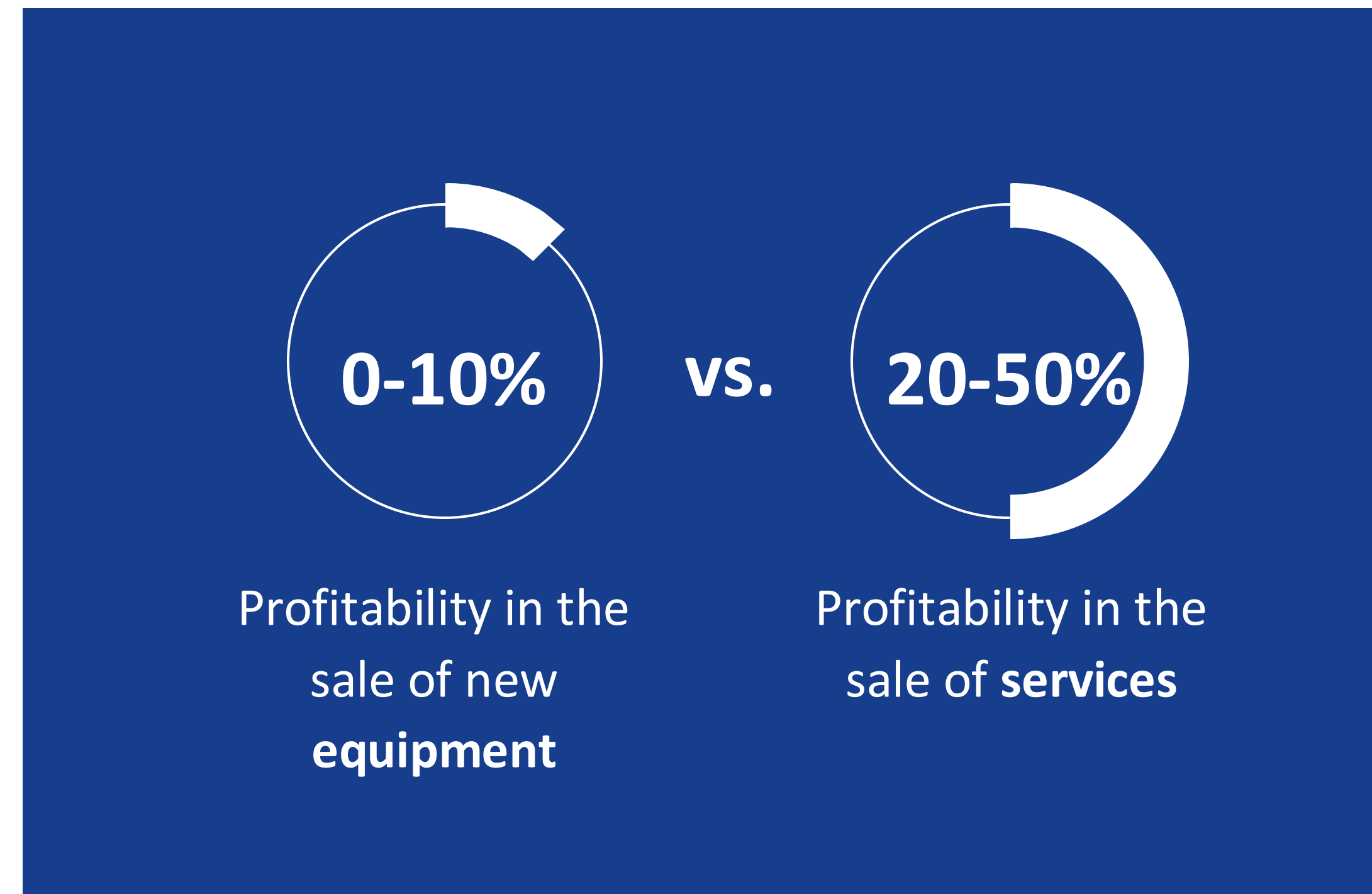
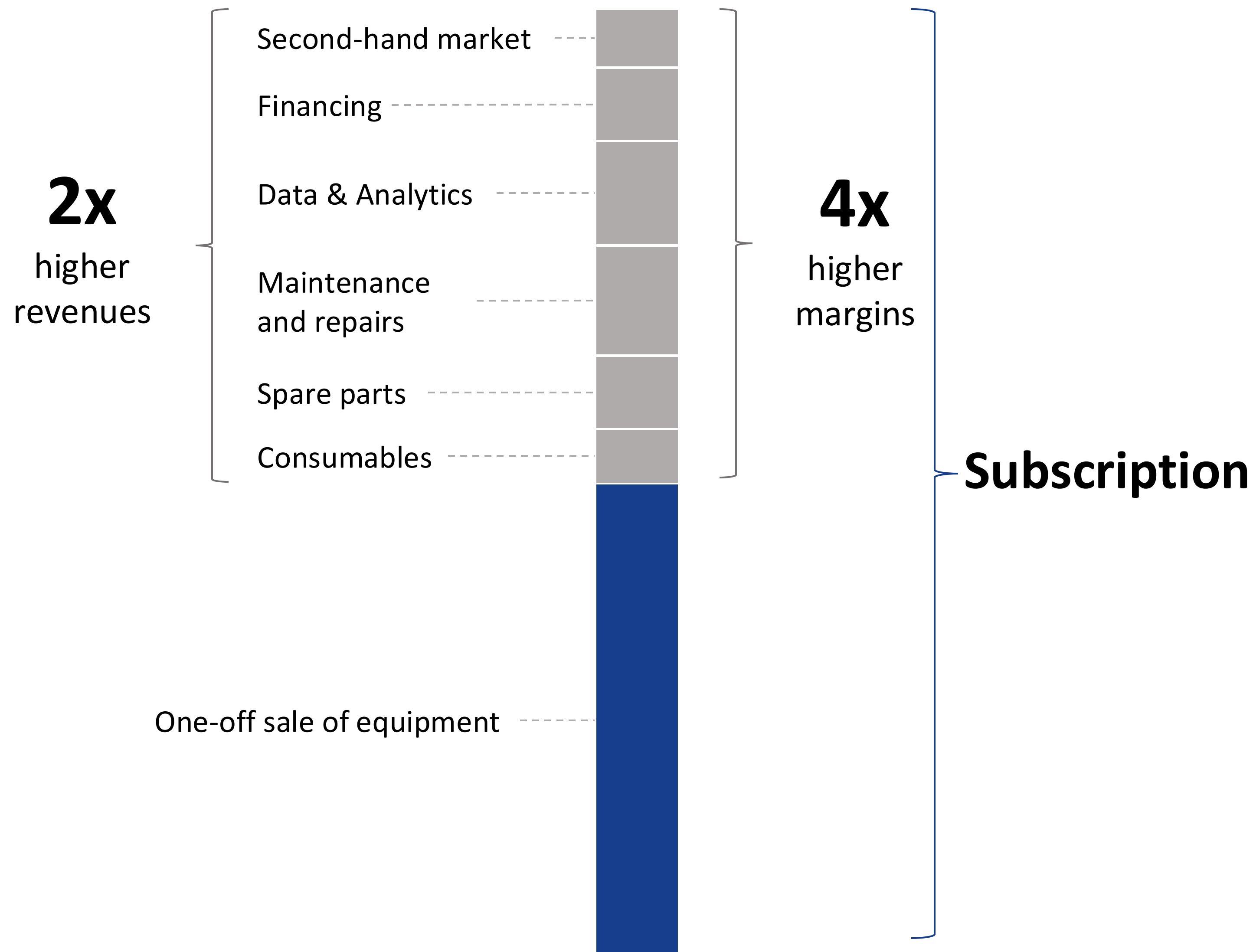
Subscription companies are about resilience and stability; S&P 500 companies are about fluctuation and reaction.



Revenue Growth

Traditional companies severely suffered from the pandemic, whereas growth for subscription companies slightly declined but kept a double-digit pace.

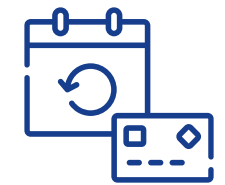
Subscriptions enable manufacturers to monetise the complete lifecycle of products.



What benefits do subscription models provide?

Win-win-win: Subscriptions offer benefits for manufactures, customers, and our planet.

Manufacturers:



Stable recurring revenue streams.



Collect **data** along product lifecycle & monetise complete product lifecycle.



Enhanced customer relationships and loyalty.



Focus on **customer lifetime value** & align with **customer's success metric**.

...

Customers:



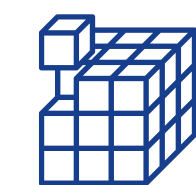
Reduced investment hurdles and shift from CapEx to **OpEx**.



Cost and expenditure predictability.



Outsourced operational risk of equipment.



Increased flexibility and productivity.

...

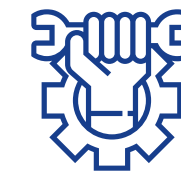
Planet:



Incentive to **prolong lifetime** of equipment.



Incentive to design **easily repairable** equipment.



Access to **second-hand market** of equipment.



Incentive to implement **end-of-life strategies** (Reduce-Reuse-Recycle).

...

What transformation does a switch to a subscription model entail?

Key questions you will ask yourself during the subscription innovation journey.

Value Proposition & Pricing

- For which products? For which type of customers?
- Which packaging makes sense? One-size-fits-all? Good-better-best? Objective-specific plans? À la carte? Which features are core/optional?
- How to price? Time/usage/output-based? How to design for up- and cross-sales to increase customer lifetime value?

Digitalisation & Data

- Is current equipment digitalised?
- Which parameters should be collected?
- Who are the right partners to team up with?
- What to do with the collected data?

Billing & Payments

- How does my current IT system need to be adapted?
- How to automate usage-based revenue collection and billing?
- How to allow customers to adapt their subscriptions over time?
- What are the most important KPIs to track?

Financing & Accounting

- What are the implications on cash-flow & balance sheet?
- Which type of financing structure to set up? Subscription- or usage-based financing?
- Who are the right partners to team up with?

Legal

- What clauses are specific to a subscription/as-a-Service models and need to figure in the contract?
- Who's responsible if something happens?
- How long should the contract duration be? What about follow-up contracts?

Sales & Company Culture

- How do you sell subscription models?
- How to adapt the incentives scheme?
- How to adapt the company culture towards a recurring service-mindset?



How to get started with your subscription business model transformation?

Subscription Action Plan™: A structured framework to organise your 9-18 months-long subscription business model transformation. Workshops on all key challenges you will face.

1. Conceptualise Subscription Model

- 1.1. Intro brainstorming, conceptualisation & scope
- 1.2. Project planning & market research
- 1.3. Target equipment & target customers
- 1.4. Customers' challenges & needs
- 1.5. Customer interviews
- 1.6. Subscription models & value propositions
- 1.7. Test models with customers (customer interviews)
- 1.8. Assess and validate models

2. Build Subscription Offering

- 2.1. Connected services (via IoT) & Equipment mgmt. system
- 2.2. IT-infrastructure
- 2.3. Subscription lifecycle – Customer lifecycle
- 2.4. Subscription plans
- 2.5. Subscription pricing for customers
- 2.6. Financing structure
- 2.7. Contracts & General terms and conditions & risk mgmt.

3. Subscription Go-To-Market Strategy

- 3.1. Land & Adopt – Sales and marketing processes
- 3.2. Expand & Renew – Cross-and up-sells & Follow-up plans
- 3.3. Adapting roles & Review sales compensation schemes
- 3.4. Sales playbook & support material (offers)
- 3.5. Subscription KPIs & FAQs
- 3.6. Training sales reps
- 3.7. Training customers on procuring subscription models
- 3.8. Sustainability implications

Launch Subscription Model!

Subscription Experts Ecosystem™: Access to a network of 20+ expert partners.

On very specific topics that might require additional expertise throughout your subscription business model transformation, we can connect you with the right partners.



Case study

We helped Detandt-Simon develop a Ventilation-as-a-Service business model, where they guarantee a certain air quality to their customers.

10 Month project duration

+150% Revenue



Problem

Previously, Detandt-Simon (distributor) sold to installers that sold to end-customers. Detandt-Simon had no clue how equipment was being used (**no monitoring**), nor was equipment consumption being optimised (**no optimisation**). Besides, **high upfront investments** repelled certain customers.

Solution: Ventilation-as-a-Service

The new strategy now involves **continuously guaranteeing a certain air quality**. Detandt-Simon now **sells directly to end-customers**, partnering up with existing installers. **No upfront investment** is required, instead a subscription is provided including **connected equipment** and **complementary services** such as maintenance, monitoring, optimisation, etc. Customers **only pay for performance** as equipment regulates and optimises consumption based on the air quality.

*“With P2S’ methodological approach, we managed to **launch the project in 10 months**. P2S helped us increase our average project **revenue by 150%**. Tailored workshops, insights, best practices, and putting us in contact with the right partners all contributed to a very creative working atmosphere.”*



Wathek Ferchichi
Technical Director
Detandt-Simon SA

The question probably is not if your company should develop a recurring revenue model, but when and how.

Contact us:

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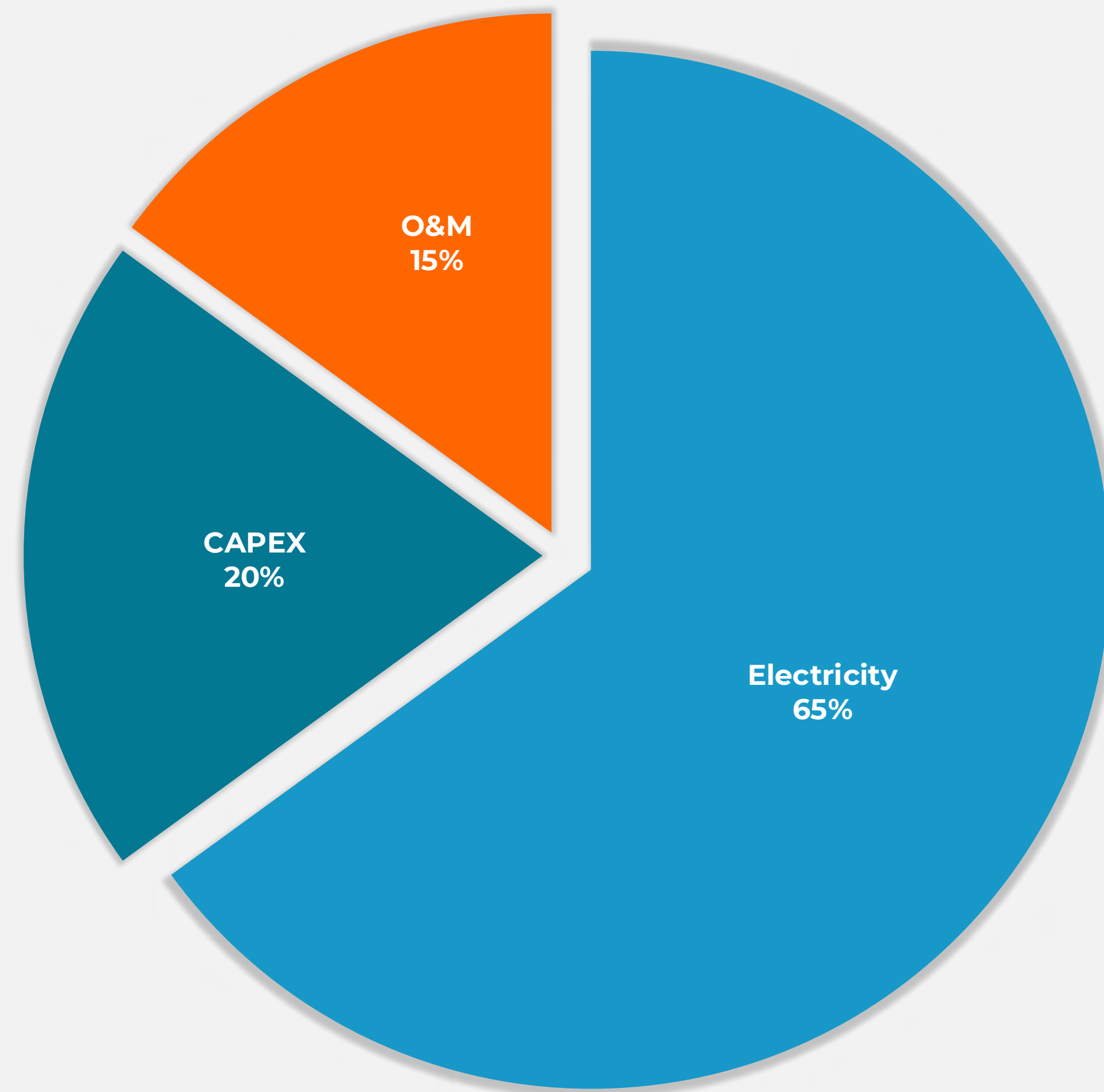
www.p2sconsulting.com

Cooling as a Service

The background of the slide is a close-up photograph of numerous water droplets of various sizes on a dark, reflective surface. The droplets are illuminated from above, creating bright highlights and soft shadows, giving them a three-dimensional appearance. The overall color palette is dark with highlights of white and light blue.

Our journey to CaaS – Shifting risk

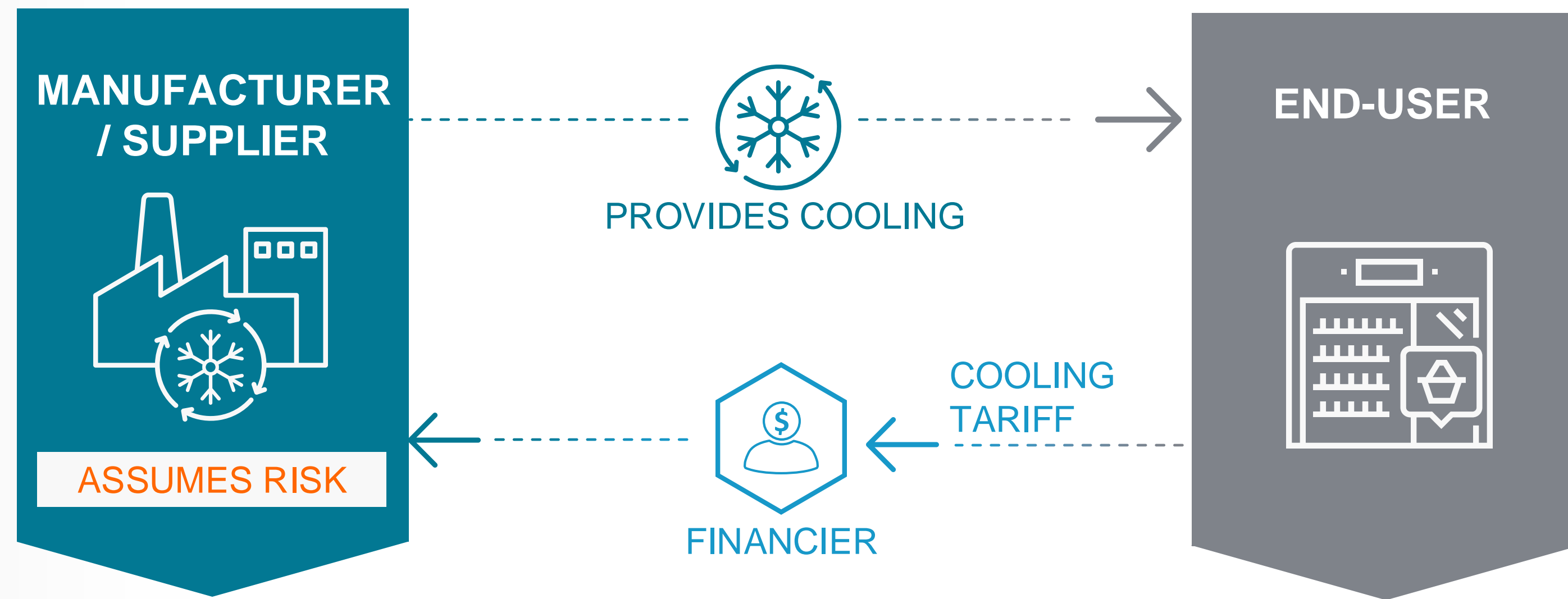
>65%
of lifecycle
cooling cost
is **electricity**



Electricity drives the **cost of cooling**, yet in practice only temperature is monitored.

This is a **RISK** that the client cannot control.

Why shift the risk?



Highly efficient systems

= less energy usage,
lower operational costs,
less maintenance,
longer lifespan
= **Higher profitability**

Long-term contract

Recurring model

Business relationship
secures future work

**Uptime
Efficiency**

RISK

PROFIT

Environmental:

reduced emissions
via natural refrigerants and
improved energy efficiency

Increased operational focus and
associated product quality

Reduced LCC of cooling and
predictability

Zero capital outlay / investment in
system / equipment

IN COMBINATION, PROVIDES LOWEST LIFE CYCLE COST

Innovation in technology & data management

From **complexity** to
simplicity
Data must lead to...
Action!!

Asset Management

Unlock performance and efficiency through **intelligent, informed** decisions



The financier perspective – Creating scale



Partnership
between
supplier and
financier is key
to success

CaaS is an attractive investment vehicle:

- The **risk is low** because the operator is also the subject matter expert, giving stable and predictable returns
- The **energy sector is growing**, especially sustainable energy
- CaaS technology can be **state-of-the-art** based on natural refrigerants
- This model **assists in important aspects** such as food security.

The environmental imperative

Refrigeration is a leading contributor to environmental degradation



CaaS sustainability impact



Excessive energy use through system degradation is **prevented** – responsibility with consequences



Profitability is **directly impacted** by poor system design

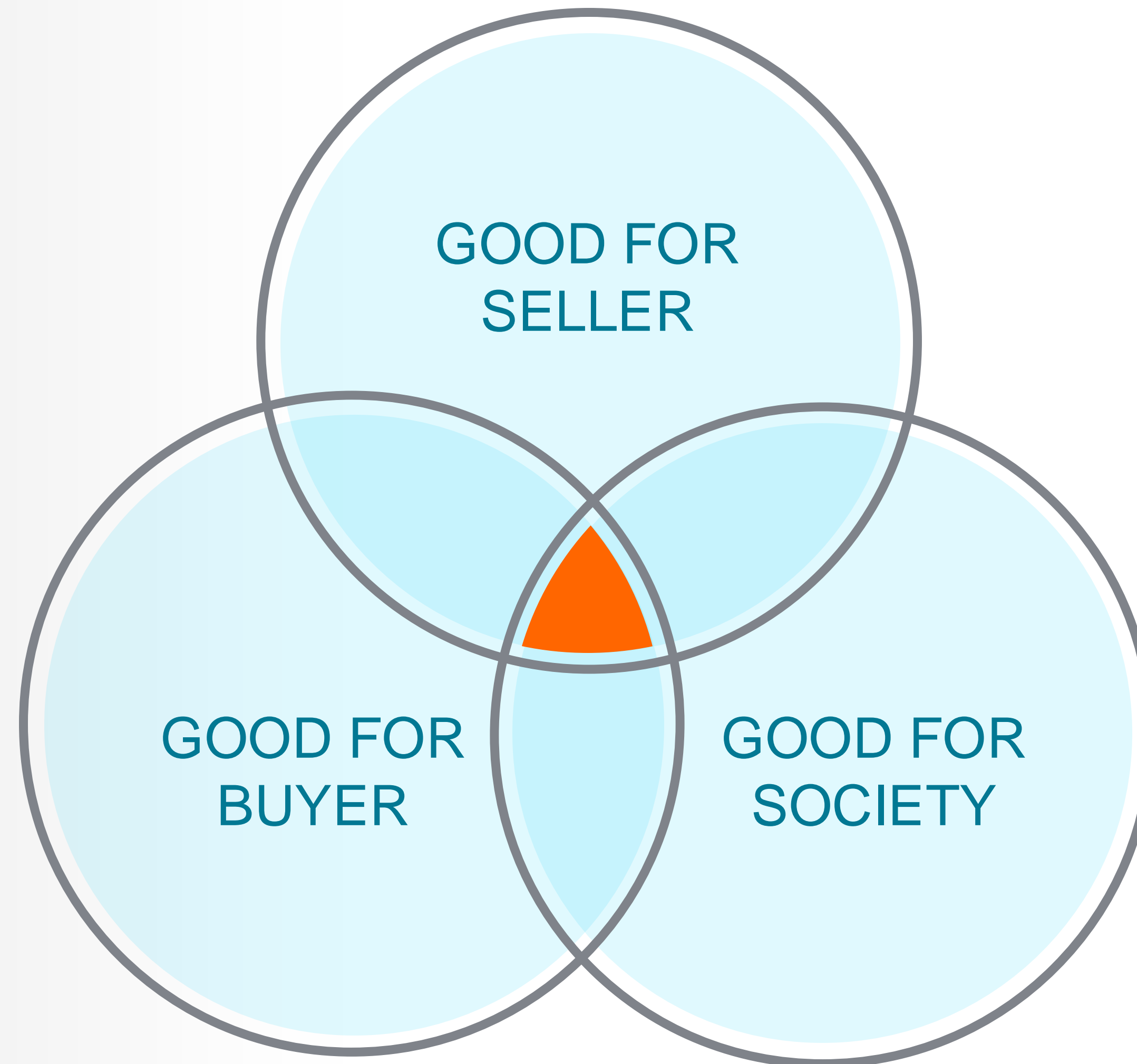


Natural refrigerants are a natural outcome of CaaS



With its high-quality data, CaaS plays an important role in **ESG reporting**.

The win-win-win of CaaS



SANPO-YOSHI

In Japanese, ***Sanpo-Yoshi*** means 'Three-Way Satisfaction'.

Business transactions provide benefits to all stakeholders – the buyer, the seller and society at large.

CASE STUDY

Clover SA

The world's first fully servitised
refrigeration, steam and power plant



\$15m

capital investment

10MW

two-stage
ammonia
cooling plant

1,180m²

boiler house

1.6MW

solar power system

CASE STUDY

Clover SA



Operational costs
lowered by



\$40m
over 20 years



Cooling efficiency
improved by

40% ↑



CO2 emissions
avoided over 20 years

132,000,000
tons

The journey:

We saw the impact of CaaS on technological advancement, operational efficiency, financial stability and environmental stewardship.
A ripple effect of positive outcomes



THANK YOU

Circular Lighting as a Service

What is C-LaaS and the value It delivers to clients

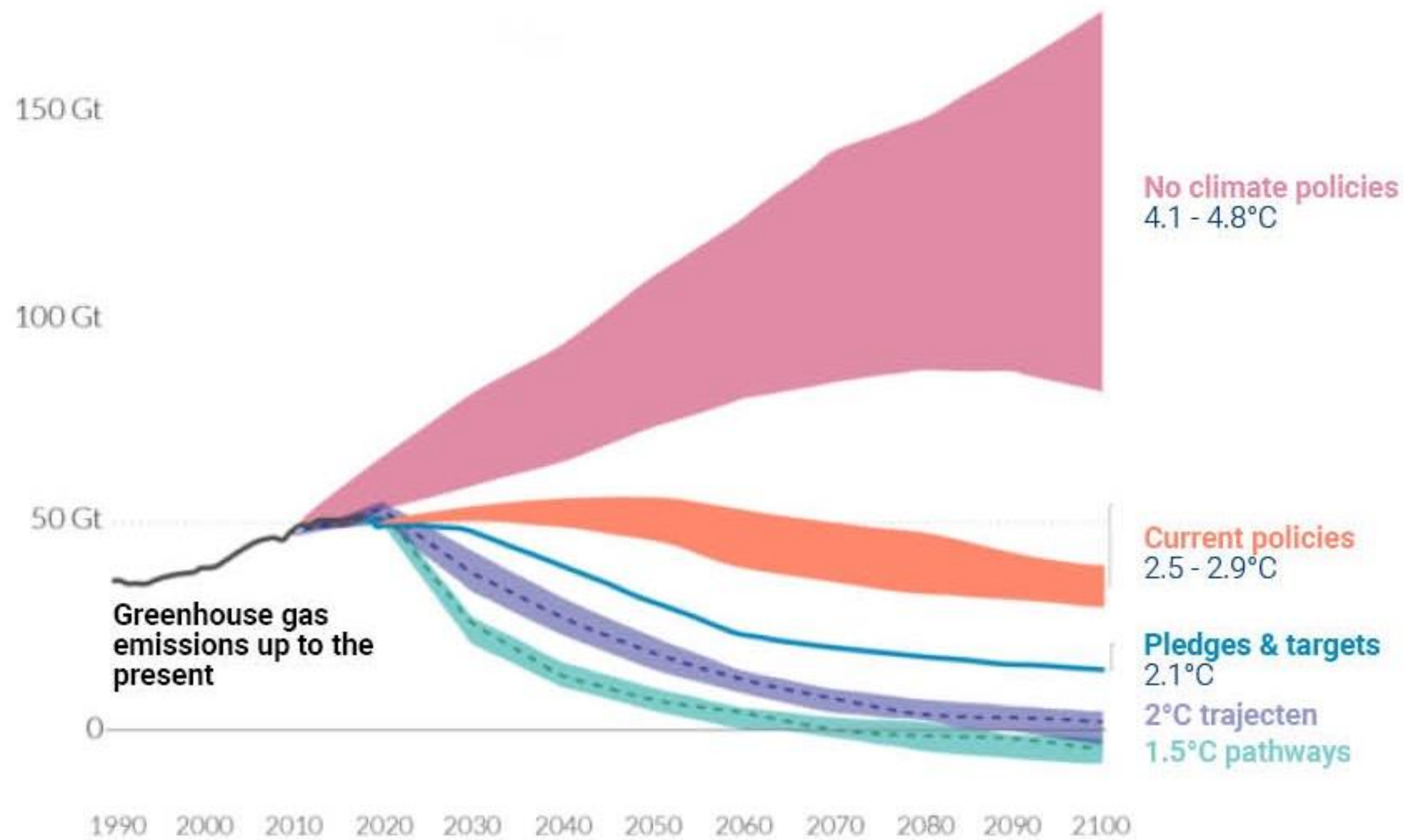
ETAP YOUR PARTNER IN CIRCULAR LIGHTING

Facing 2 mega-challenges



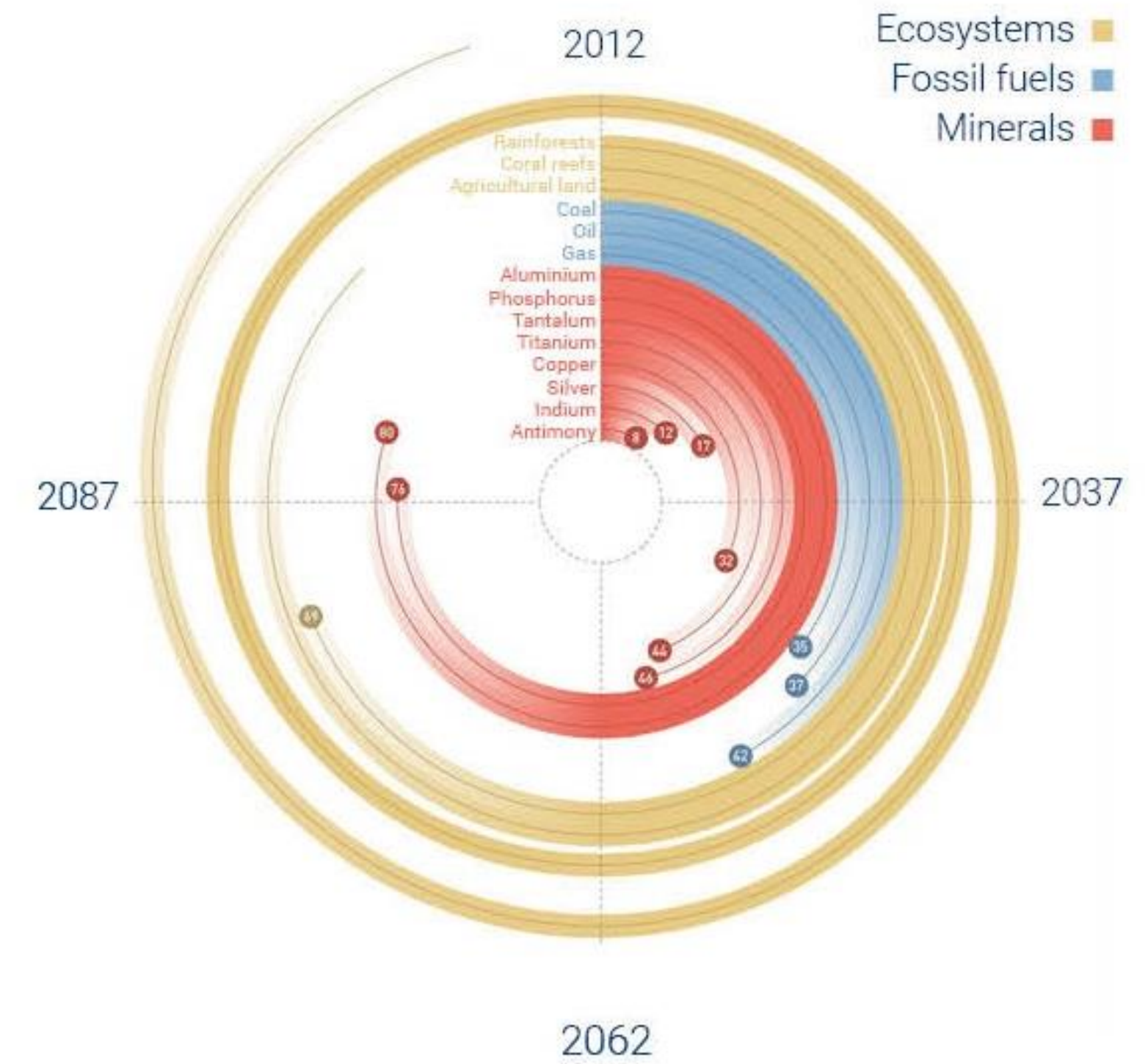
Global Climate change

Update april 2022



Depletion of natural resources

Estimated remaining world supplies of non-renewable resources



ETAP YOUR PARTNER IN CIRCULAR LIGHTING

Our Brand Promise



Tomorrow's light:

Innovative lighting,
delighting our customers.

Tomorrow's light:

Lighting with a 'light' footprint,
so that our lighting will not
weigh on the future of the
planet.



ETAP YOUR PARTNER IN CIRCULAR LIGHTING

C-LaaS: a strong enabler of a circular economy



For a fixed periodic amount we guarantee a pre-defined lighting performance and energy consumption optimised for circularity.

Offering owners an **EFFORTLESS,**
WASTELESS and **ENDLESS** experience.

ETAP YOUR PARTNER IN CIRCULAR LIGHTING

C-LaaS: an example

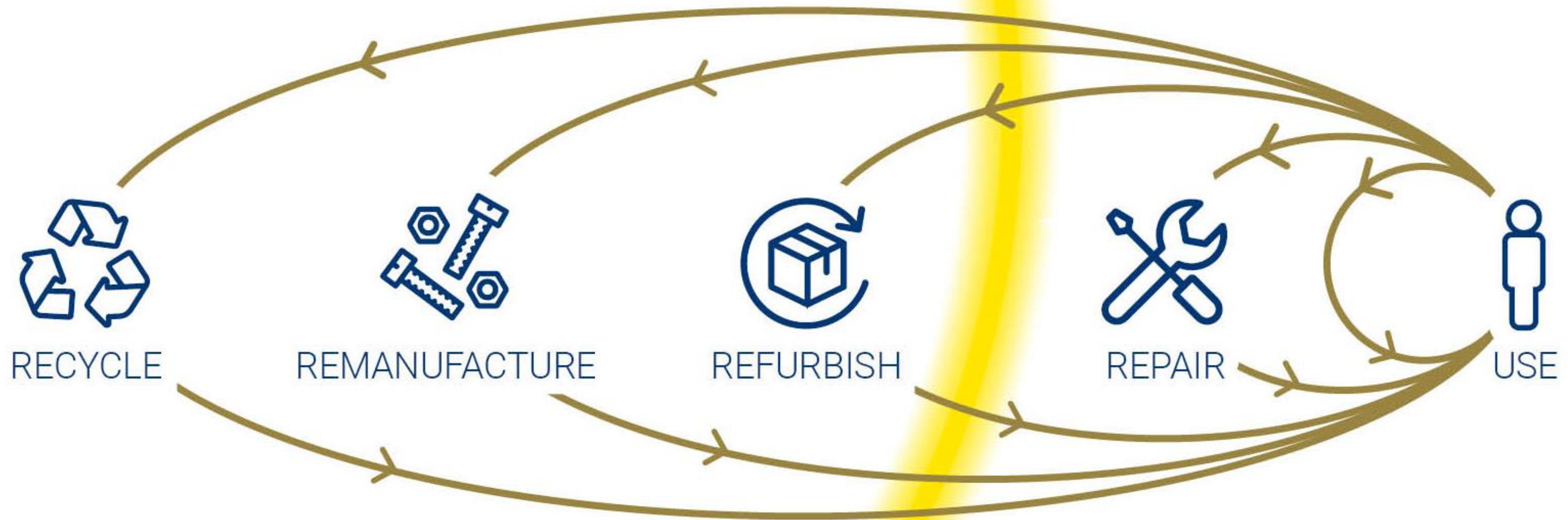


C-LaaS Project
Sint-Paulus College
Waregem (Belgium)

20% less luminaires
80% refurbished luminaires
70% energy savings
20 years performance
contract

ETAP YOUR PARTNER IN CIRCULAR LIGHTING

Putting our brand promise in action



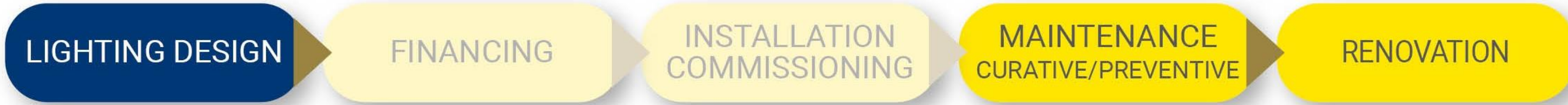
WASTELESS

EFFORTLESS

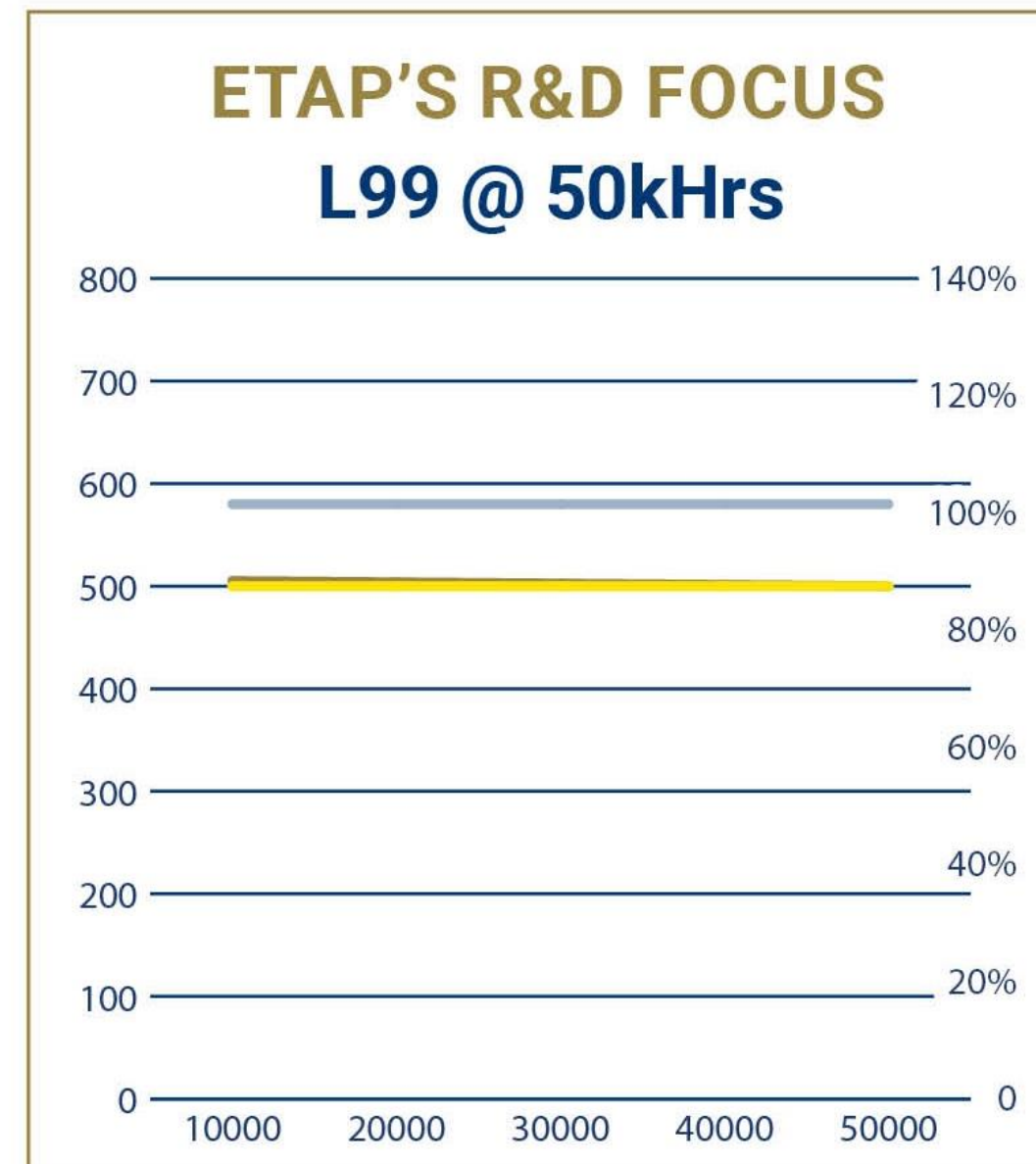
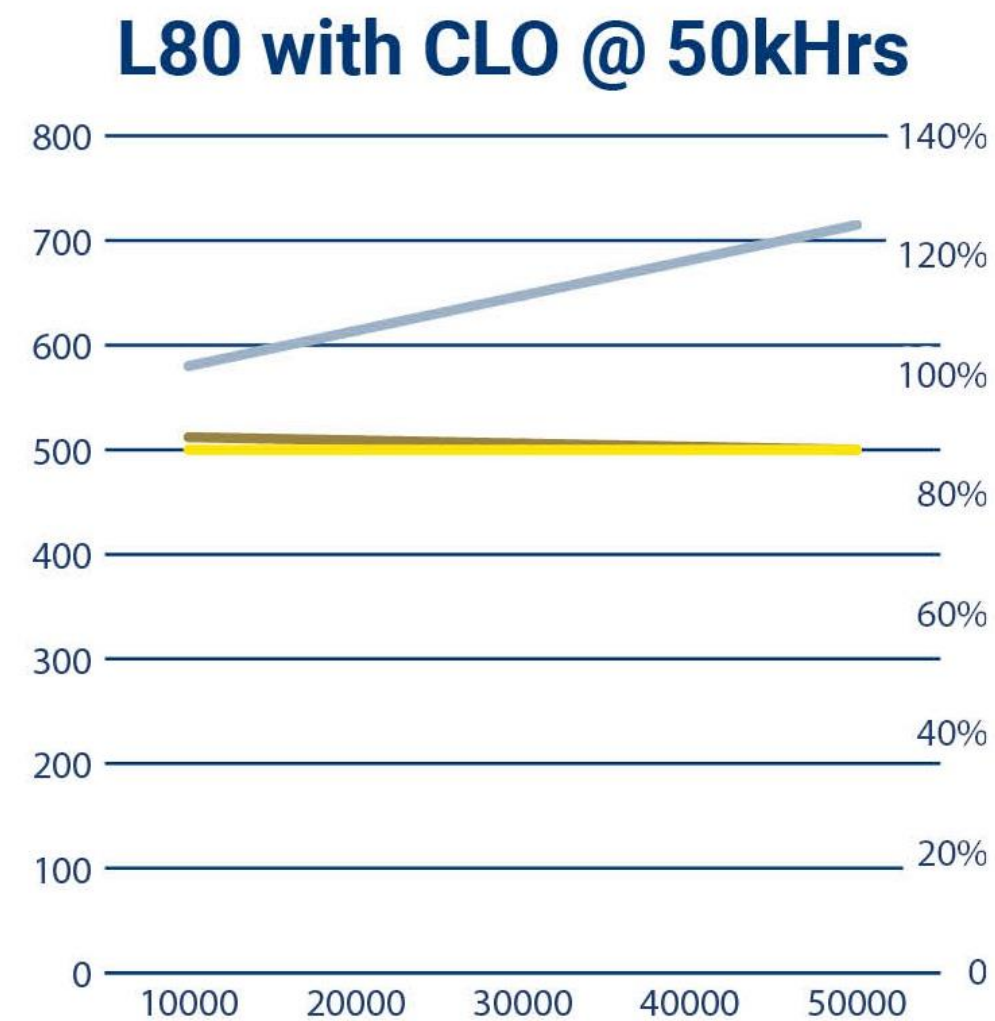
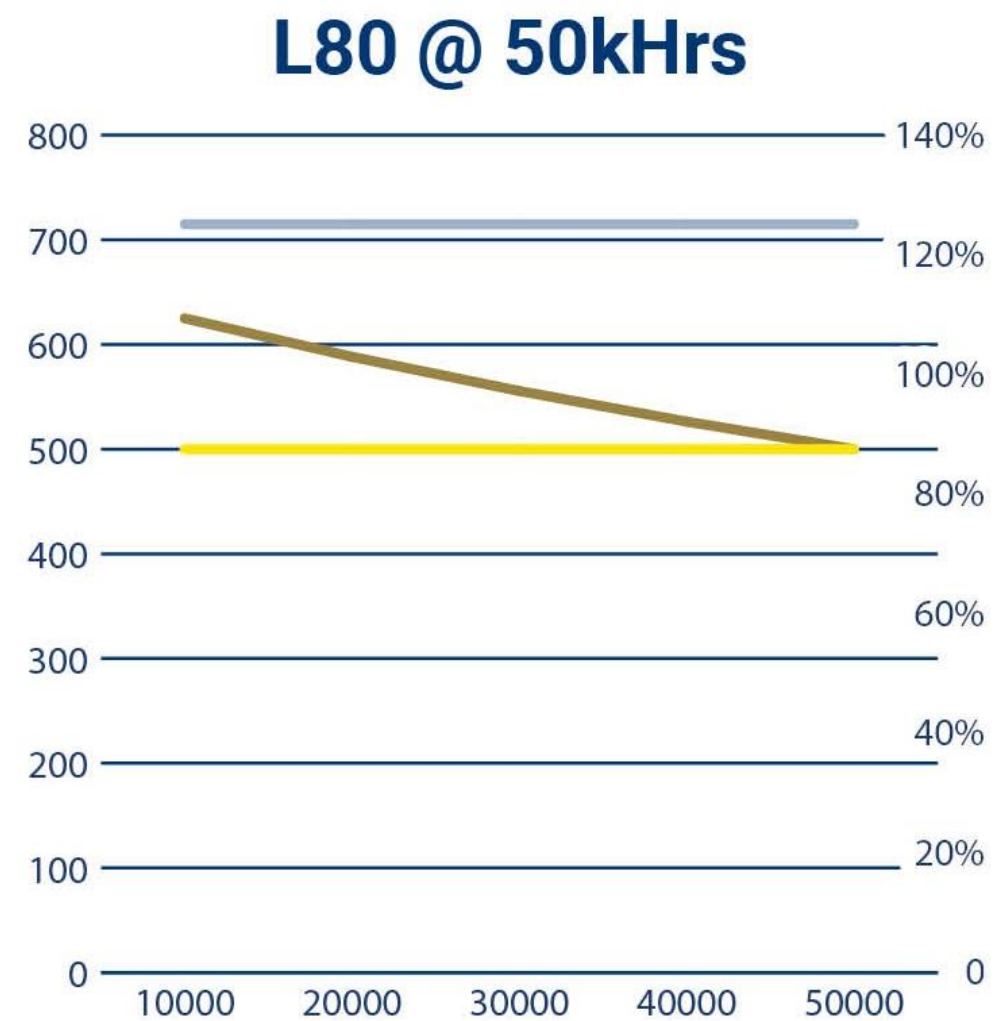
ENDLESS

ETAP YOUR PARTNER IN CIRCULAR LIGHTING

Design for project lifecycle



- Required lux levels
- Actual lux levels
- Power consumption



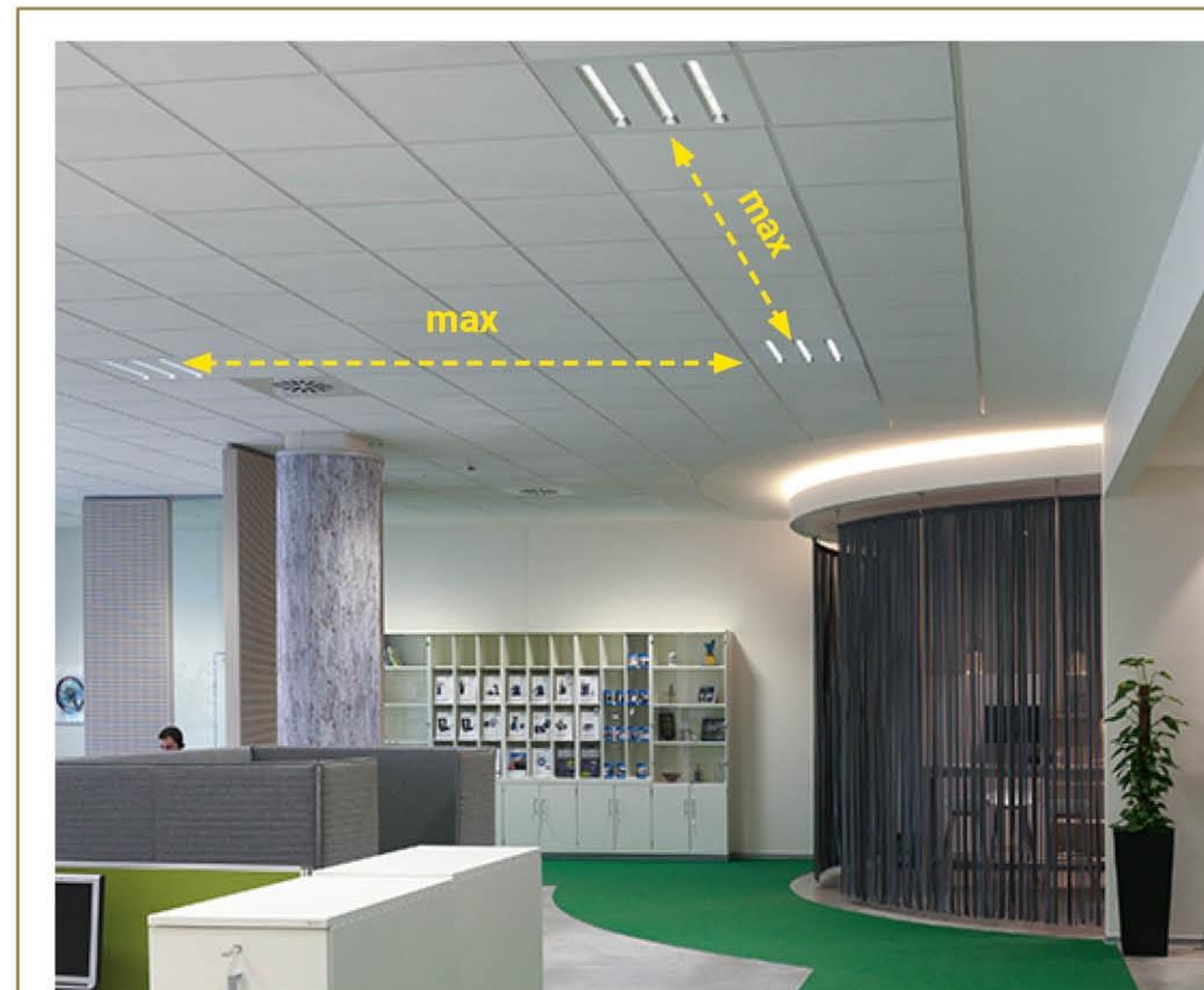
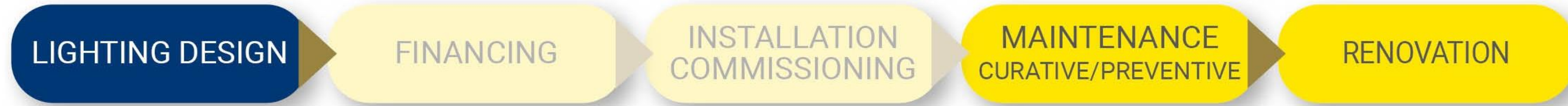
Prolong useful lifetime

A circular product design reduces waste from the start

Tomorrow's light is **ENDLESS**

ETAP YOUR PARTNER IN CIRCULAR LIGHTING

Design for project lifecycle



Our **U3 OFI** range:
(Optimized For Interdistances)

Office 28.8 x 14.4 m
32 pcs of U3352/LEDN770S

-55% LUMINAIRES

544 lux

0.74 W/m²/100 lx

Solution optimized for
Interdistances

A circular product design reduces
waste from the start

Tomorrow's light is **WASTELESS**

ETAP YOUR PARTNER IN CIRCULAR LIGHTING

Design for project lifecycle




1ST GEN E8
13 Kg
118 lm/watt
24,450 lumen
IP20



'sealed for life' design

→

NEW E8
10 Kg
167 lm/watt
24,350 lumen
IP65



3 anti-drop screws give access to all electrical connections for easy installation and servicing.

Driver and gasket can be easily replaced. Unique for an IP65 luminaire.

The diagram illustrates the transition from the first generation E8 luminaire to the new E8 model. On the left, the 1st Gen E8 is shown as a rectangular, suspended fixture with a 'sealed for life' design. An arrow points to the right, where the NEW E8 is shown as a more compact, circular fixture. The NEW E8 is highlighted with three yellow circles around its anti-drop screws, which provide access to electrical connections. A callout line points to the driver and gasket area, noting that they can be easily replaced, a unique feature for an IP65 luminaire.

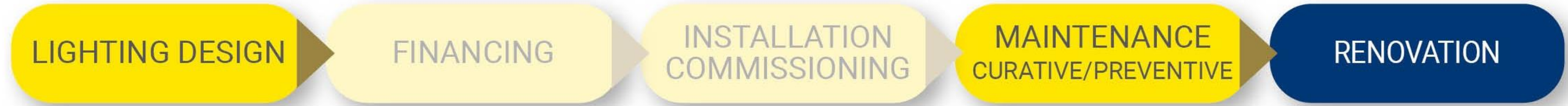
Luminaires are easily accessible

A circular product designed for easy maintenance

Tomorrow's light is **EFFORTLESS**

ETAP YOUR PARTNER IN CIRCULAR LIGHTING

Minimal invasive renovation solution: refurbishment



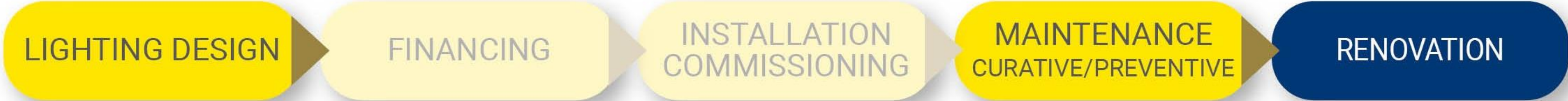
Luminaire refurbishment

For lighting and emergency lighting

Tomorrow's light is **ENDLESS**

ETAP YOUR PARTNER IN CIRCULAR LIGHTING

Minimal invasive renovation solution: refurbishment



ETAP YOUR PARTNER IN CIRCULAR LIGHTING

Circular Light as a Service



For a fixed periodic amount we guarantee a pre-defined lighting performance and energy consumption optimised for circularity.

Offering owners an **EFFORTLESS**, **WASTELESS** and **ENDLESS** experience.

LIGHTING DESIGN

FINANCING

INSTALLATION
COMMISSIONING

MAINTENANCE
CURATIVE/PREVENTIVE

RENOVATION

- Quick Budget scan of building
- Assessment of refurbishment options
- Optimizing the lighting design
- Agreement on performance parameters
- Agreement on renovation business case

- Customer opts for self-financing or financing by ETAP

- ETAP supervises installation partners and secures proper commissioning of general and emergency lighting systems

- ETAP ensures compliance to agreed performance criteria over 20 yrs
- ETAP ensures norm-compliant emergency lighting over 20 yrs

- Contract extension with maintenance contracts
- Refurbishment to upgrade existing installation
- Transfer of ownership
- Return to ETAP for re-use or recycling in accordance with Weelabex standard

ETAP YOUR PARTNER IN CIRCULAR LIGHTING

Circular Light as a Service: what's in it for the customer?



Improved transparency and optimized TCO

Reduced risks of operation

Save own financing for core business investments

Enhancing Efficiency

Operation optimisation



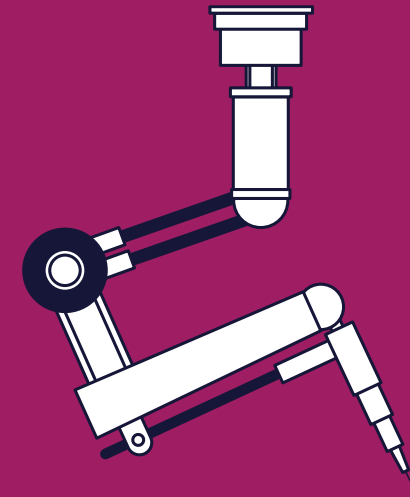


**INDUSTRIAL
PLANT**

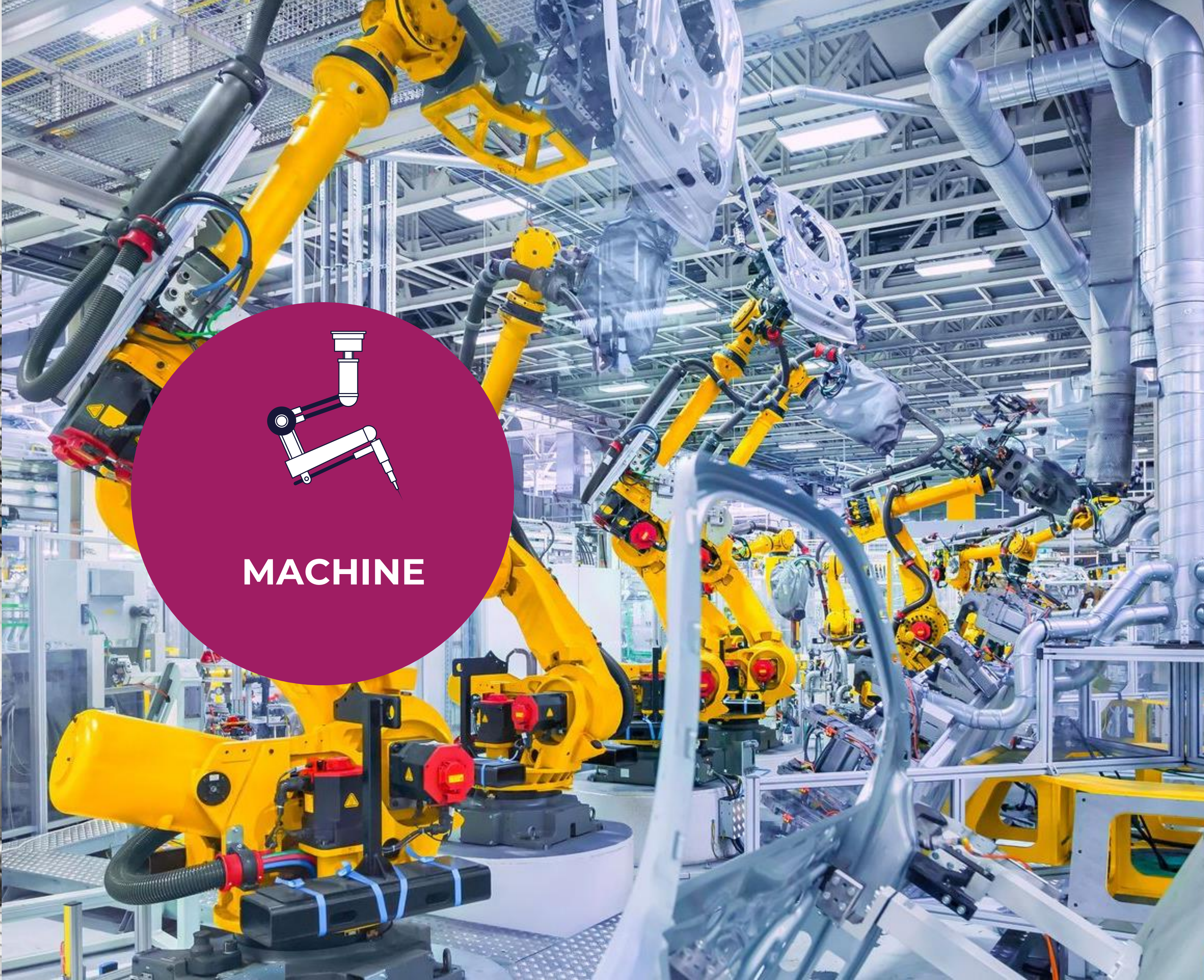




**INDUSTRIAL
PLANT**

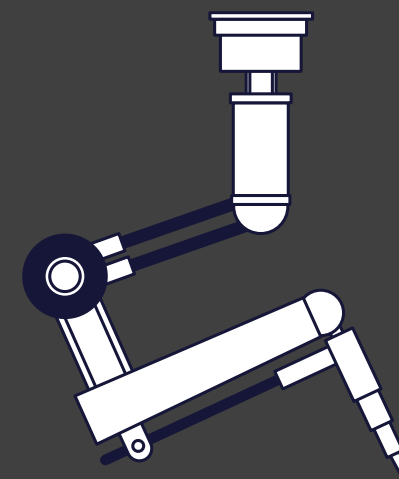


MACHINE





**INDUSTRIAL
PLANT**



MACHINE

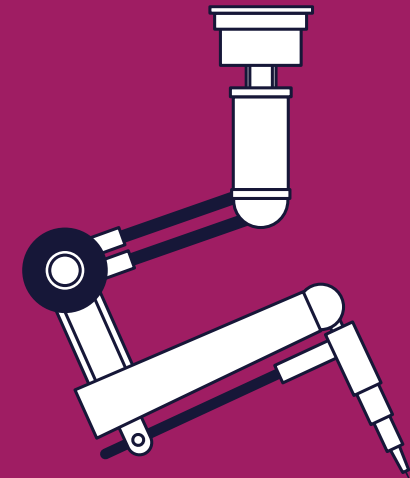


INSTRUMENT

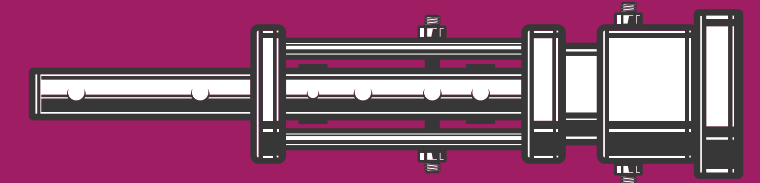
**WHICH IS GENERATED BY
COMPRESSOR THAT SUPPLIES AN
ENTIRE PLANT**



**INDUSTRIAL
PLANT**



MACHINE



INSTRUMENT



AUTOMOTIVE

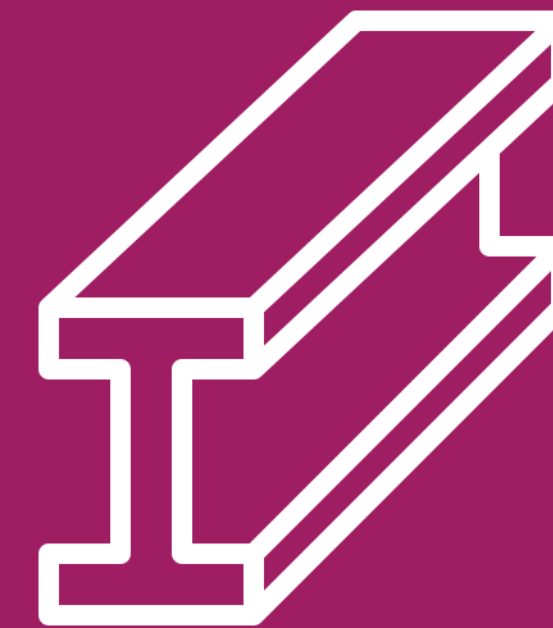


CHEMICAL



PHARMA

**COMPRESSED
AIR USAGE**



STEEL



CEMENT



FOOD

INDUSTRIAL AIR CONSUMPTION

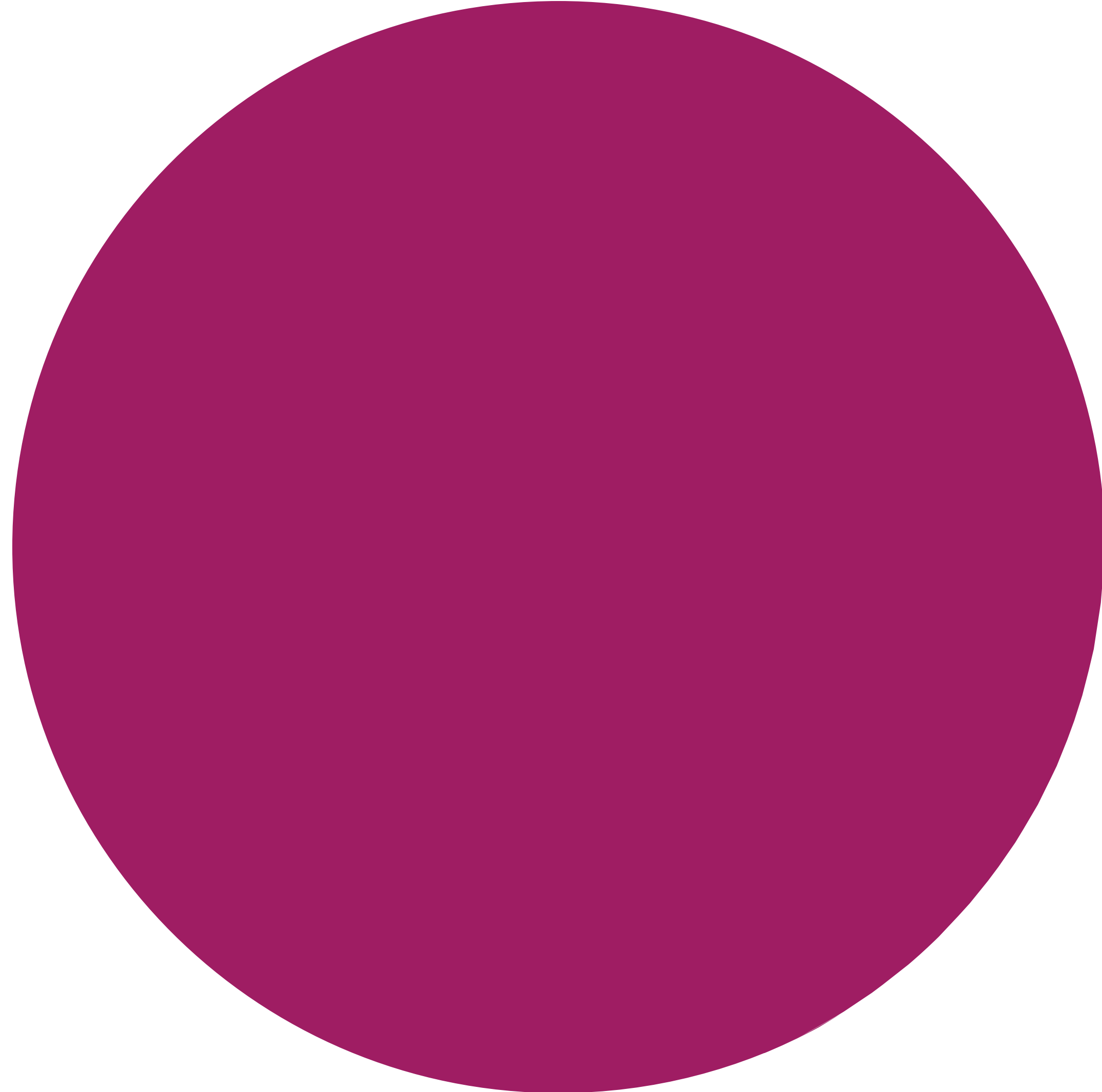
DIREKTIN
connecting innovations



20%

COMPRESSED AIR CONSUMPTION

20% COMPRESSED AIR CONSUMPTION



20% COMPRESSED AIR CONSUMPTION



60%

ENERGY SAVING
POTENTIAL OF
COMPRESSED AIR





60%

ENERGY SAVING POTENTIAL
OF COMPRESSED AIR

10%

FRAGMENTED
MEASURES

50%

EFFICIENCY
IMPROVEMENT OF
THE SUPPLY CHAIN

60%

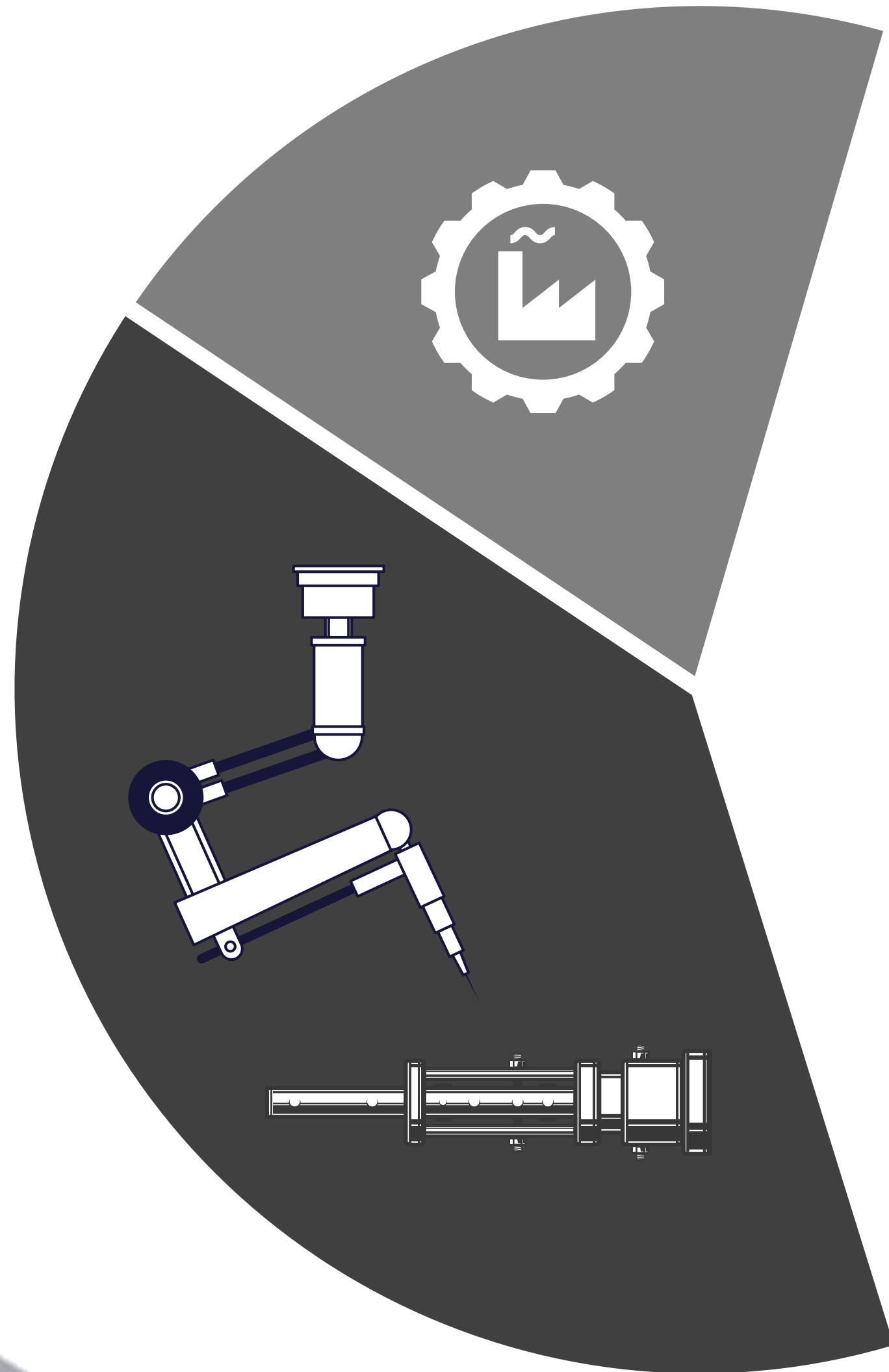
ENERGY SAVING POTENTIAL
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10%

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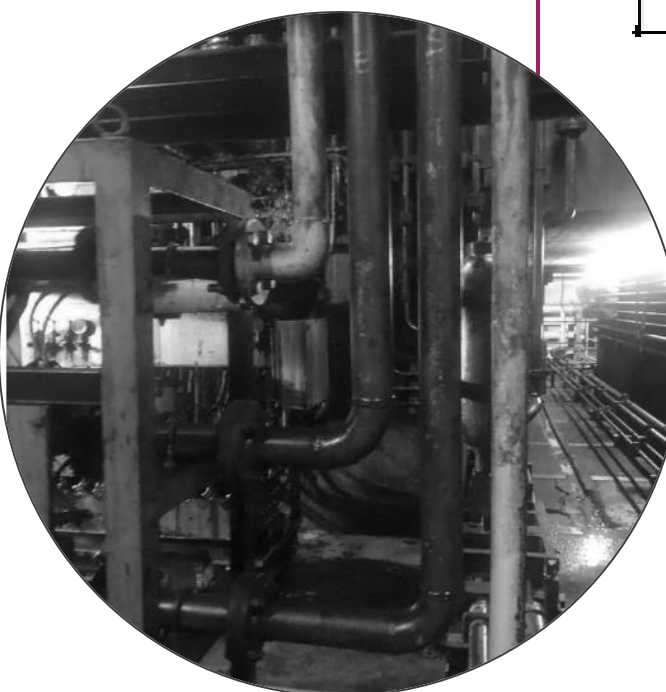
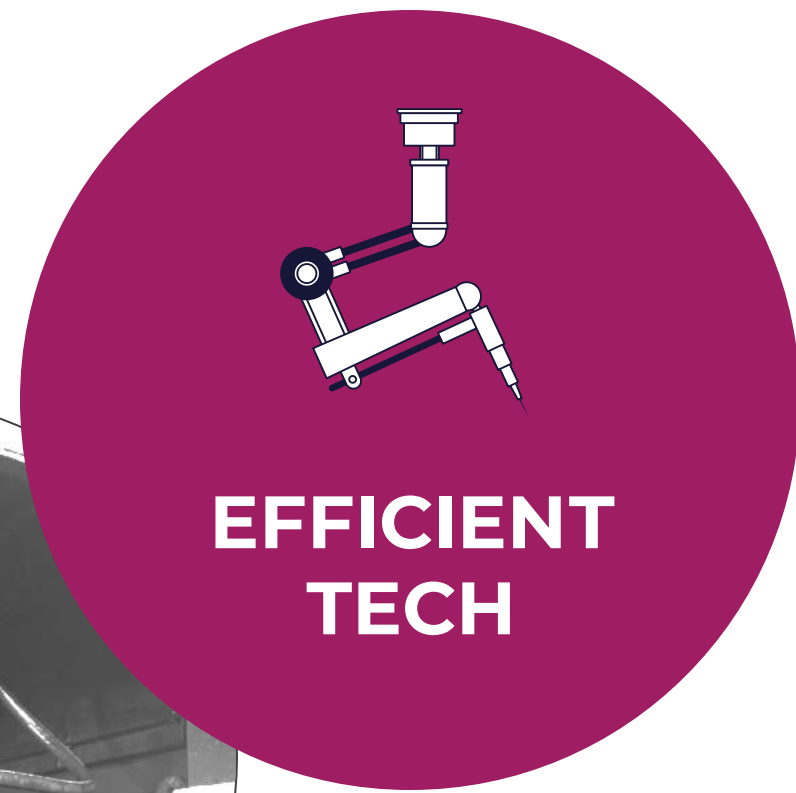
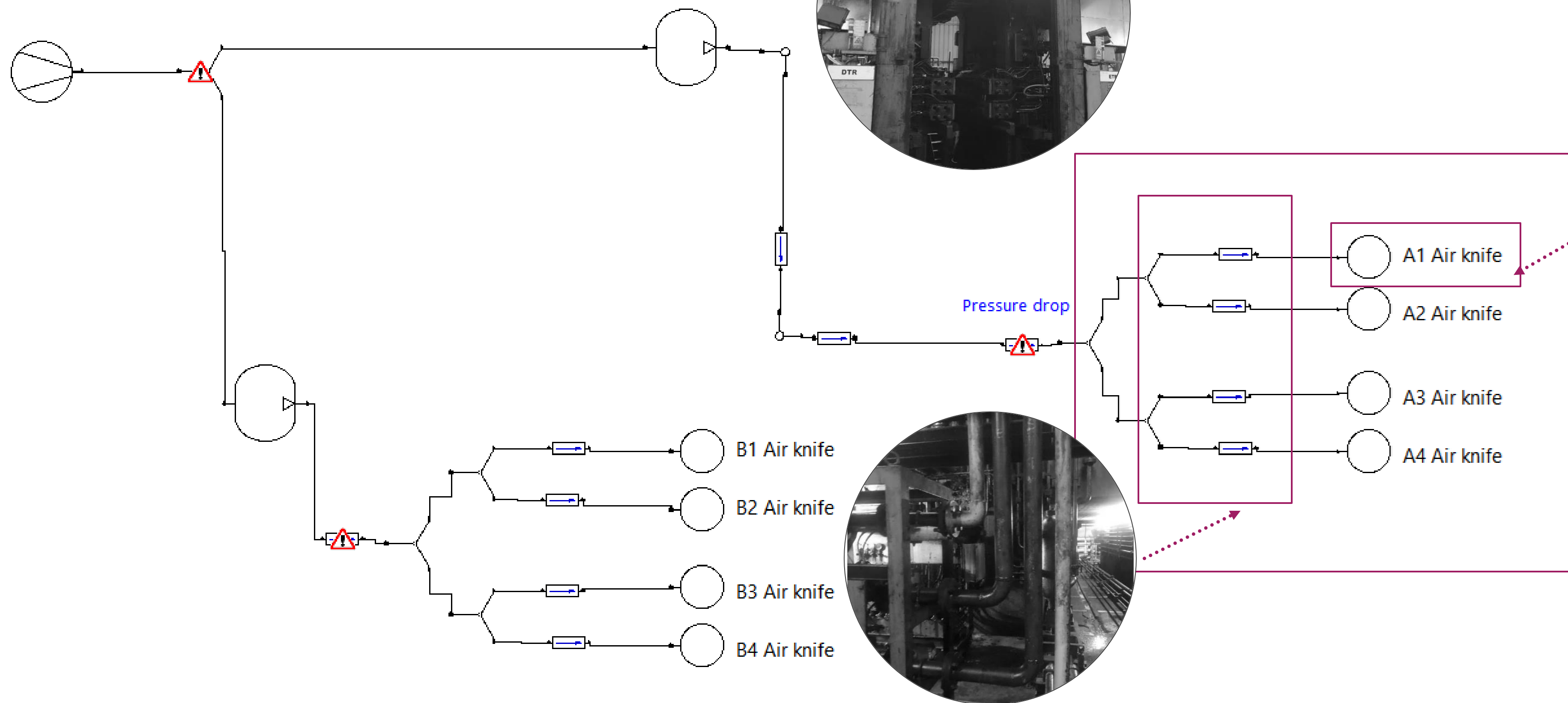


SIMILAR TO HOUSEHOLD



CAS DESIGN REVIEW

STEEL PLANT IN MOROCCO



PROJECT GOAL

INSTALL NEW EFFICIENT EQUIPEMENT

AIR COST

EXISTING SYSTEM:
6.8 MIO MAD per year

WITH NEW EQUIPEMENT:
9 MIO MAD per year

WHILE THE PROCESS IS IMPROVED:
ENERGY COST IS 25% HIGHER

CONCLUSION



COMPRESSED AIR SYSTEM IS NOT DESIGNED TO OPERATE WITH NEW EQUIPEMENT!



AUDITS RESULTS AFTER 5 YEARS

ENERGY EFFICIENCY LEVEL OF 13 FACTORIES



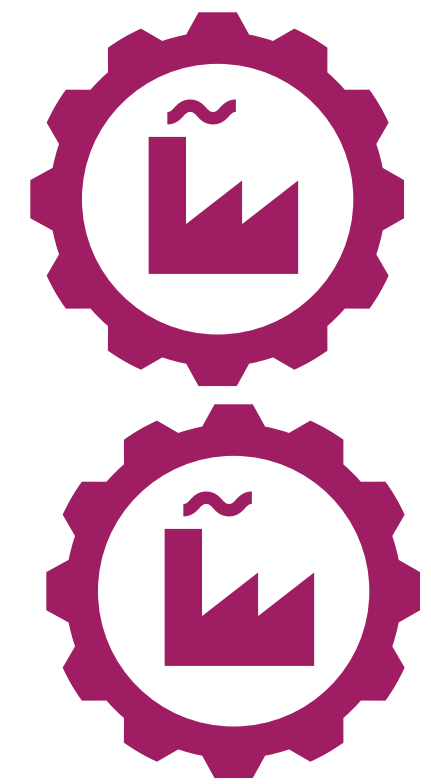
WORSE



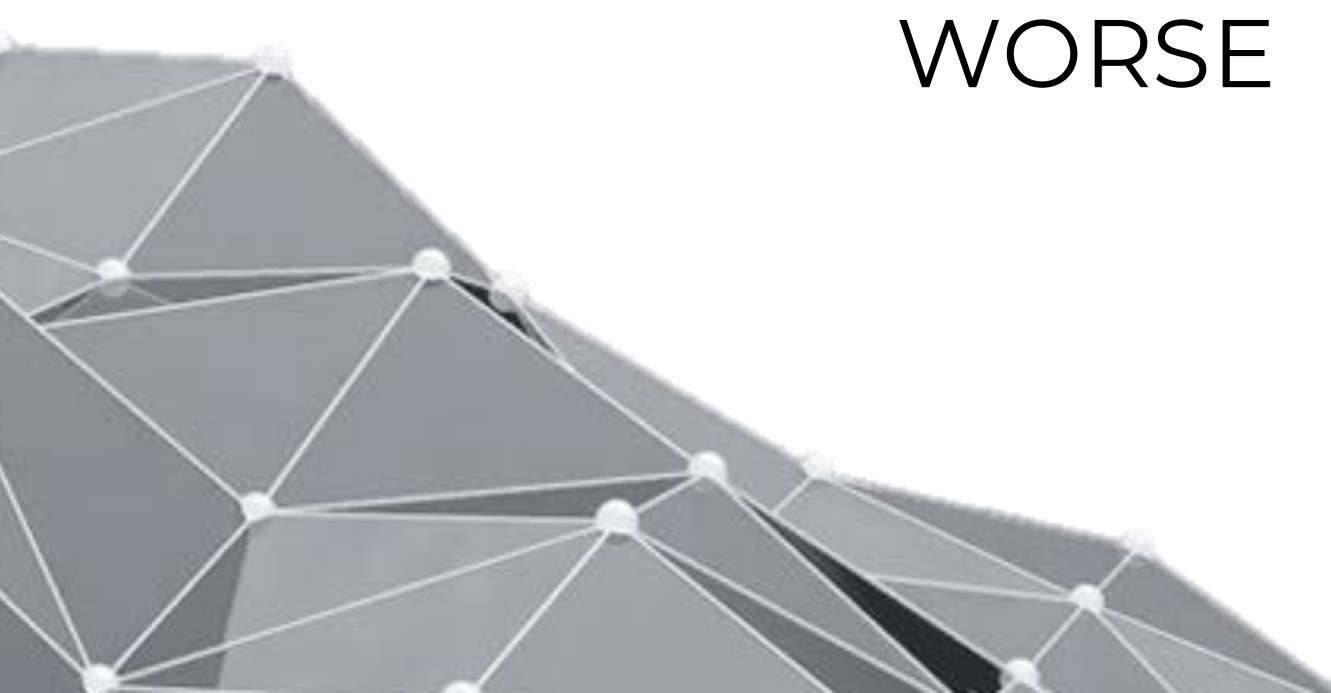
SAME LEVEL



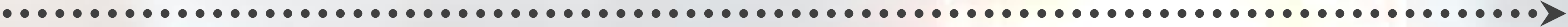
BETTER



MAXIMUM
AS PROJECTED



LINEAR SUPPLY CHAIN



EQUIPMENT SUPPLIERS

-  **EFFICIENCY IS NOT PRIORITY**
-  **HIGH PRICE**



AUDITORS AND ENGINEERING

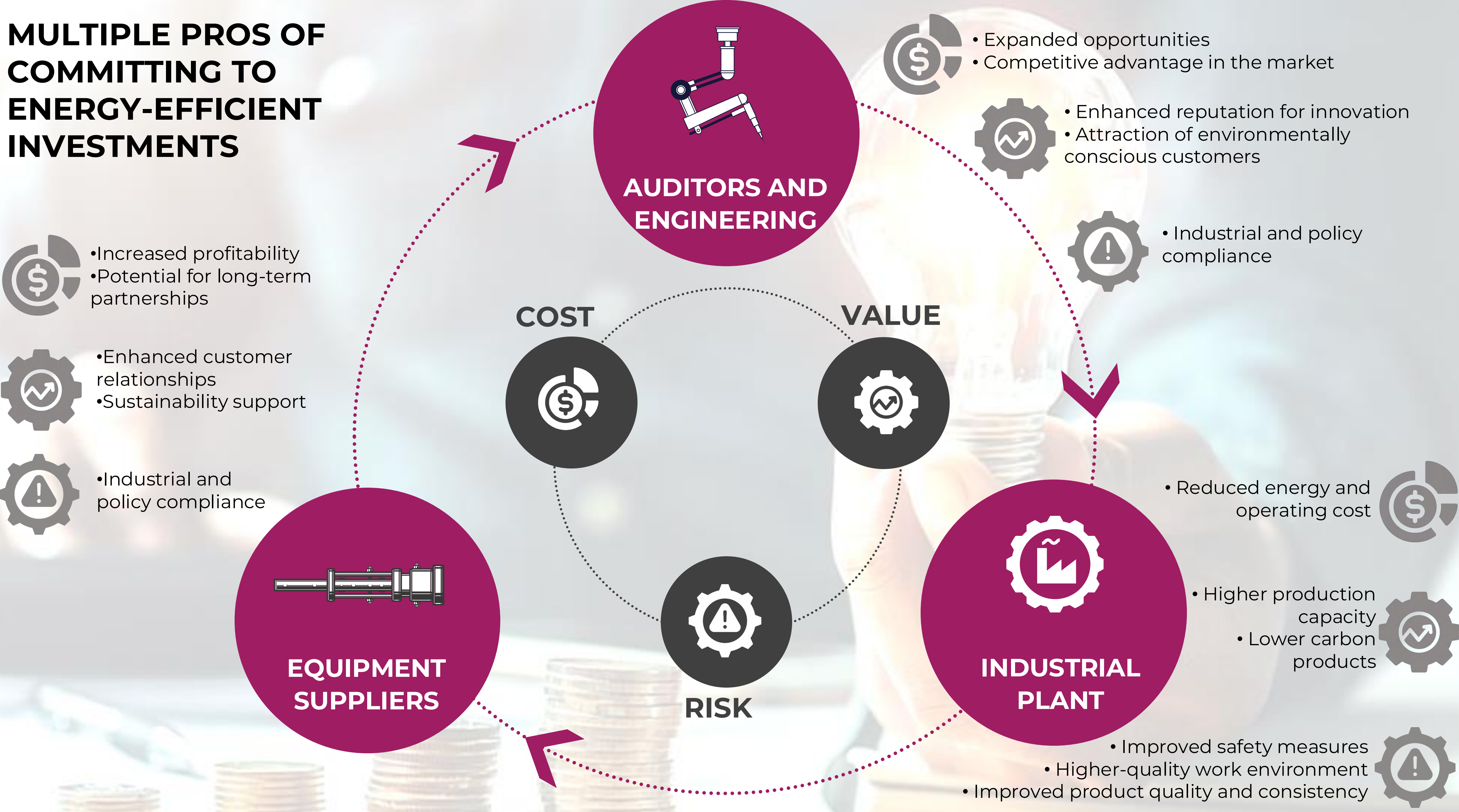
-  **EFFICIENCY IS IMPORTANT FOR PROJECTS**
-  **NOT RELEVANT**



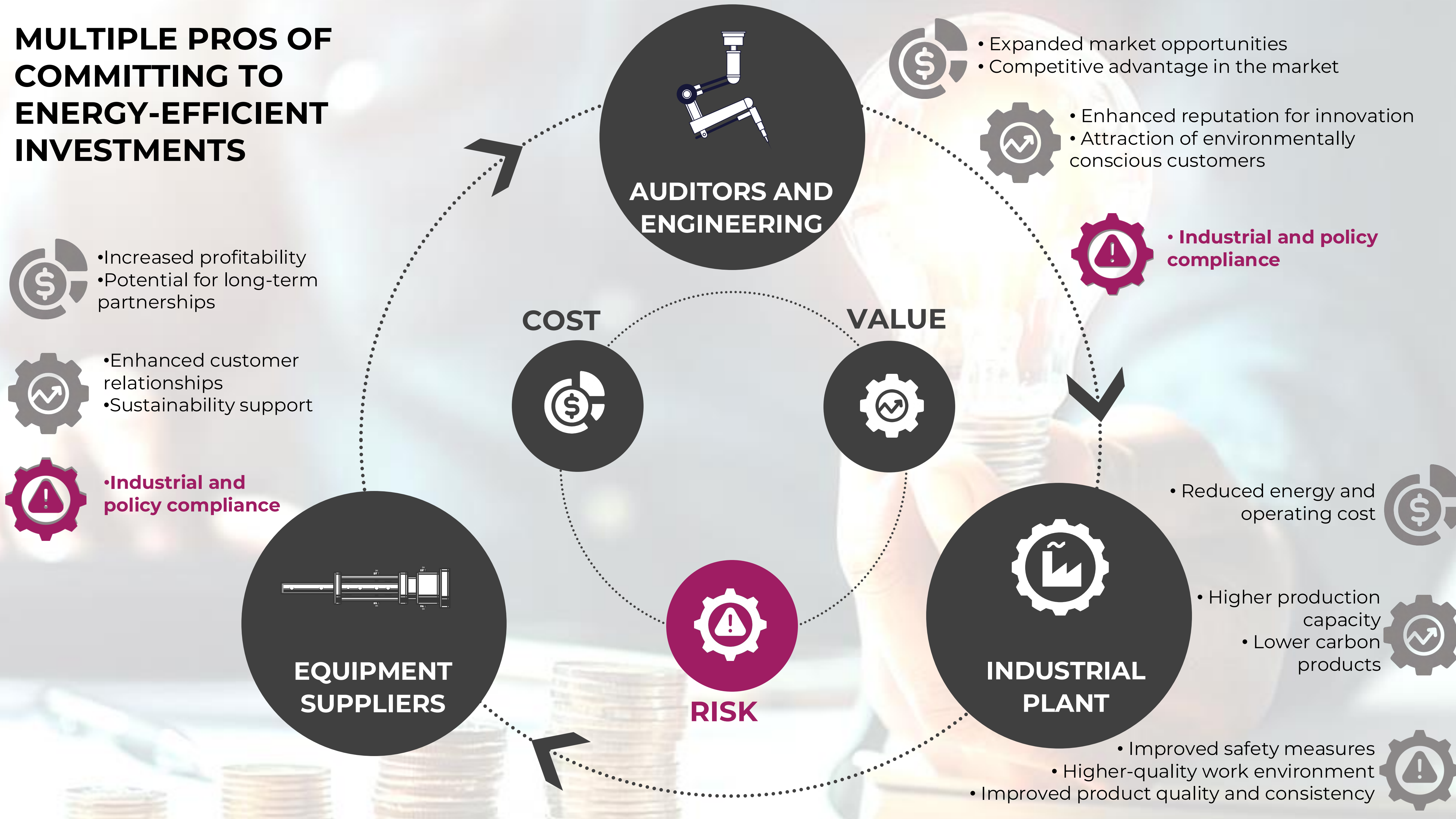
INDUSTRIAL PLANT

-  **EFFICIENCY IS IN TOP PRIORITY**
-  **HIGH PRICE**

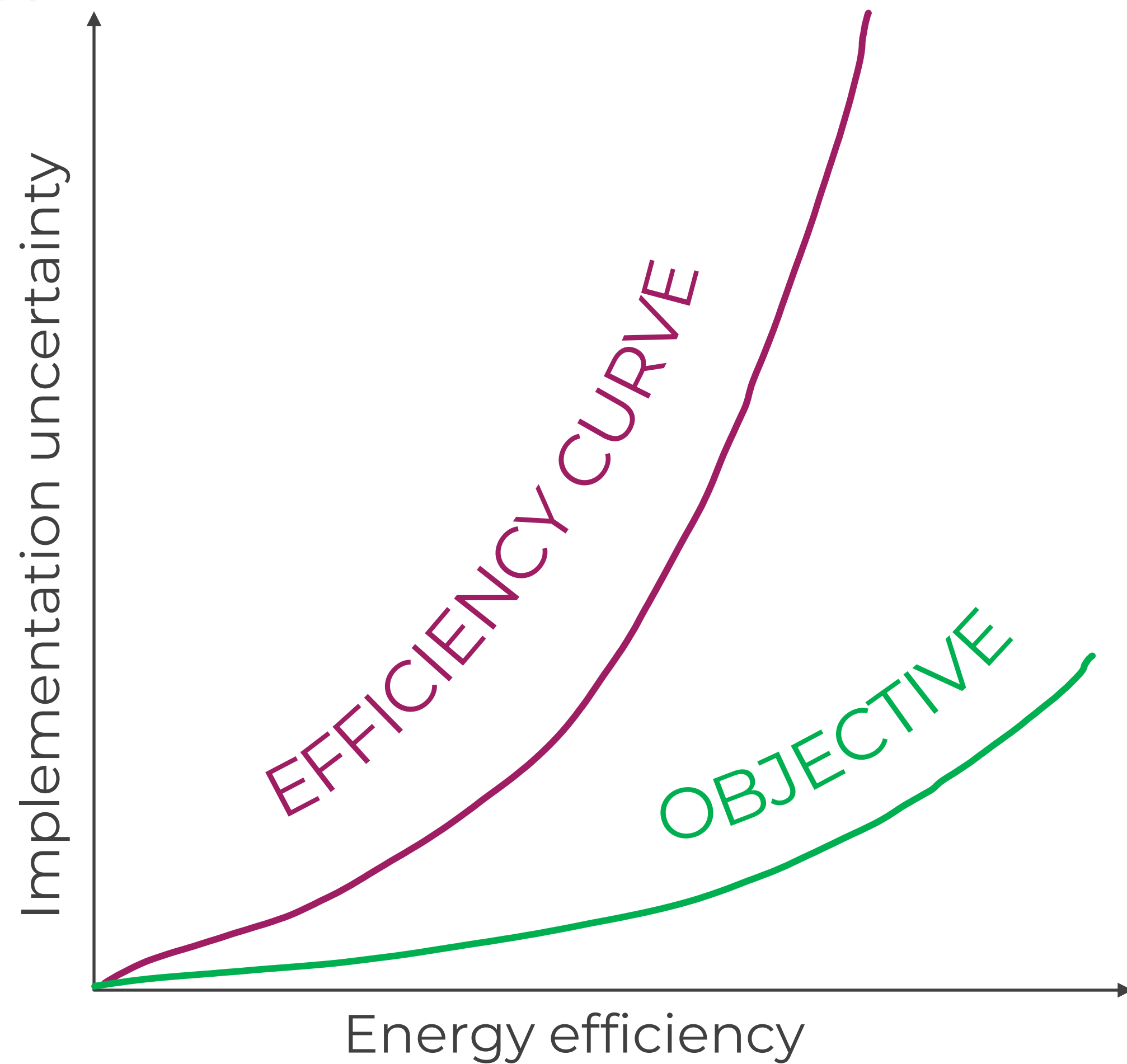
MULTIPLE PROS OF COMMITTING TO ENERGY-EFFICIENT INVESTMENTS



MULTIPLE PROS OF COMMITTING TO ENERGY-EFFICIENT INVESTMENTS



Challenges to implement efficient solutions



ISO STANDARDS



POLICY INTEGRATIONS



NEW EFFICIENT TECHNOLOGIES



EXPERTISE



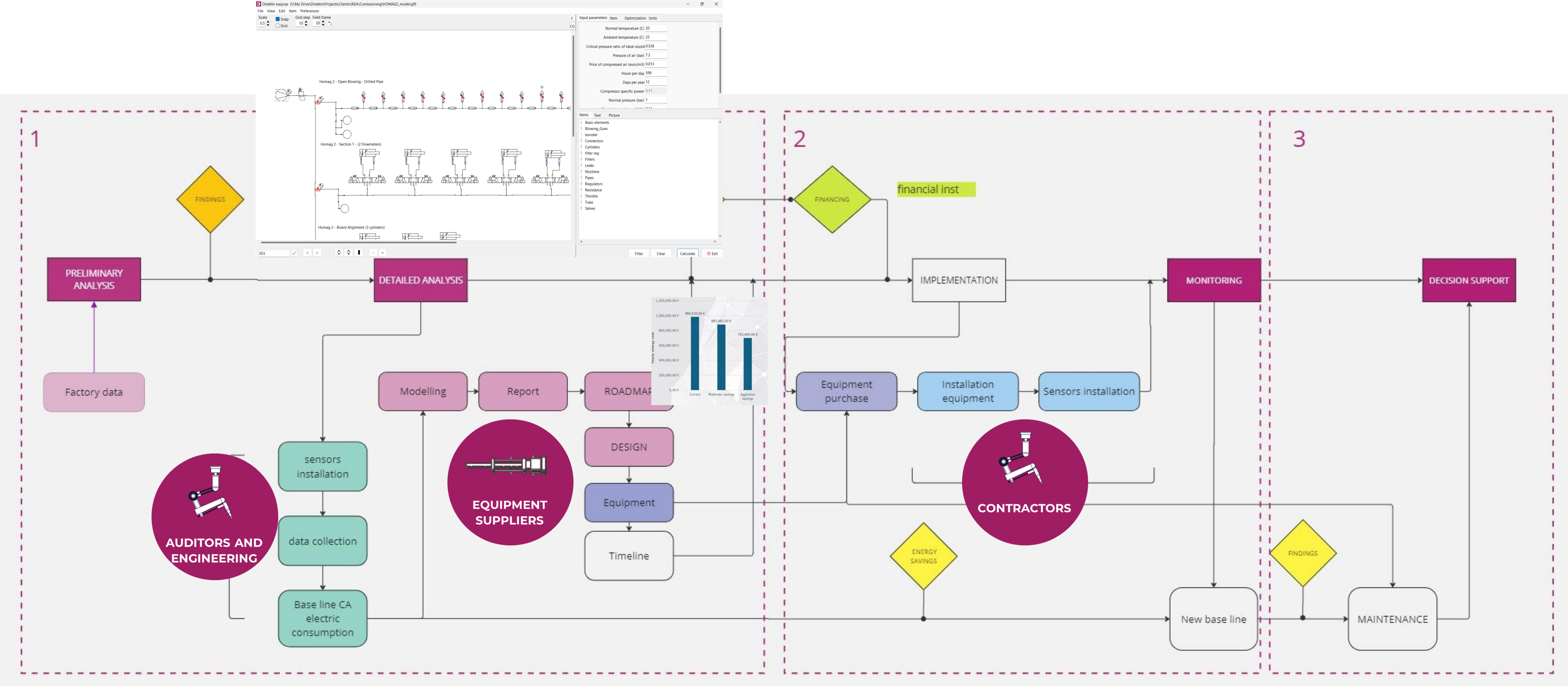
BEHAVIOURAL CHANGE



DIGITALIZATION



EFFICIENCY AS A SERVICE ROADMAP



CAEaaS

**30% ENERGY
SAVINGS AND
CARBON
REDUCTION**

SOFTWARE APPLICATION

1. Design and optimization software
2. Monitor
3. Suppliers database
4. Predictive maintenance

PORTAL

- Virtual Adaption Interface (VAI)
- Software Solution
- Industry Training
- Regulations & Standards
- Connection with experts

ECOSYSTEM

Largest Network / Database:

- End-customers: Stakeholders & participants.
- Service Providers: Engineers, Builders, & Service Providers.
- Product Providers: Compressor; Component, Software, & Sensor

Some of Our Customers



SIDPEC CASE STUDY

PETROCHEMICAL PLANT
ALEXANDRIA
EGYPT

PROJECT PROCESS

ON-SITE AUDIT-MODELLING-ROADMAP-
IMPLEMENTATION BY A PLANT

PROJECT OUTCOME

- REduced OPERATIONAL RISKS
- REduced ENERGY COST
- REduced MAINTENANCE COST
- INCREASED PRODUCT CAPACITY



USE CASE IKEA

WOODWORKING MANUFACTURER

PROJECT PROCESS

ON-SITE AUDIT-MODELLING-ROADMAP-
IMPLEMENTATION BY A PLANT

PROJECT OUTCOME

- REduced ENERGY COST: **200 000 euro**
- REduced MAINTENANCE COST
- REduced PRODUCT RISKS
- INCREASED PRODUCT CAPACITY: **+12%**





MAKE ENERGY- EFFICIENCY PROFITABLE

Dr. Elvira Rakova
FOUNDER, CTO

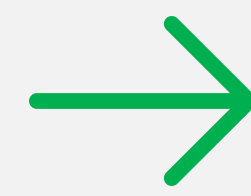
elvira.rakova@direktin.com



CaaS like other XaaS product will experience good growth in the future because the drivers are relevant to current concerns about risk



Lack and cost of **technical skills** is increasing everywhere. This is a risk to end-users



Environmental pressure to use less energy and natural refrigerants for cooling is building



CaaS will provide better **profitability** and focus for both suppliers and end-users



Partnerships between equipment suppliers, financiers and data management companies are increasing

Backup

CaaS growth

The manufacturing industry shifts towards subscriptions.

57%

of companies want to use subscription models for machine procurement.

- *VDMA, McKinsey & Company (2020)*

\$131,2B

projected size of the global subscription market by 2025.

- *Zuora (2020)*

+84%

annual revenue growth of subscription models in the manufacturing industry.

- *IoT Analytics (2021)*

P2S' clients (B2B hardware companies), are increasingly interested in developing subscription business models.

#Subscription Projects of P2S' Clients

